

Proj. No.: RA 140 DESIGN, BUILD, COMPLETION AND MAINTAIN SHEIKH JABER AL-AHMAD AL-SABAH CAUSEWAY PROJECT (MAIN LINK)	Employer: STATE OF KUWAIT MINISTRY OF PUBLIC WORKS 	Request No.: RA140-HDC-32-CBR-DRW-0053-00
Engineer's Representative:  dar al handesah TYLIN	Contractor:  HYUNDAI ENGINEERING & CONSTRUCTION	Date: 28/02/2016

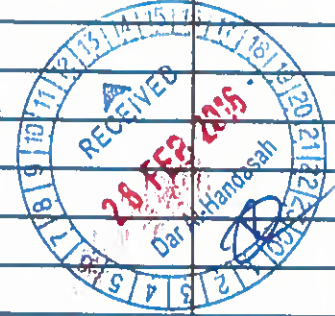
Transmittal of Construction Drawing

1. Subject Description

For Fabrication - Main Bridge Steel Deck(PART- E) Shop Drawing Package

2. Submittal Details :

Item Reference	Rev.	Description	Copies
RA-140-32-BRG-CW-DW-92140	A1	For Fabrication - Main Bridge Steel Deck(PART-E) Shop Drawing Package	1



Note
 - This drawing shall be read in conjunction with the drawing package RA140-22-BRG-CW-DW-34420-B2 and RA140-22-BRG-CW-DW-34610-B2 approved already

These are transmitted for:

☐ Your information

☒ Approval

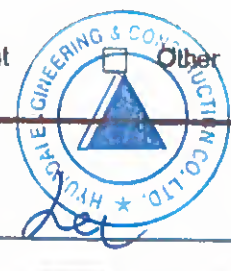
☐ Review and comment

☐ Other

We certify that the above documents have been reviewed

Submitted by: Myeong Jae Lee / Design Manager

Signature: 



3. Engineer's Representative's comments

Refer to our comments on the attached comment & response sheet



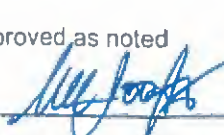
☐ Approved

☐ Approved as noted

☒ Revise and resubmit

☐ Rejected

☐ Noted

Signature: 

Date: 29.3.2016

Approval shall not relieve Contractor of his liabilities under the Contract or constitute authorization of any change to Contract Documents

RA140-HDC-32-CBR-DRW-0053-00

Comment & Response Sheet

Document No: RA140-HDC-32-CBR-DRW-0053-00

Ref. Transmittal No : RA140-HDC-32-CBR-DRW-0053-00
 Ref. Report No & DWG package No : RA140-32-BRG-CW-DW-92140-A1
 Document title : For Fabrication Main Bridge Steel Deck Part E
 Comments Issued by & date : Haytham Hassan on 29 March, 2016
 Answer Issued by & date :
 Consent Classification : C (A: Consented to, authorized to proceed / B: Consented to, subjected to comments / C: Revise & Resubmit, incorporate comments
 W: Rejected, not consented to, reason Noted)

No.	Rev.	Reference		Comment rev. ²	Comment	Response	Cat. ¹	Status ³
1	A1			1 st comment	The achievement of the final desired geometry is the Contractor sole responsibility.			
2	A1			1 st comment	The steel painting system according to Project Specifications should be shown within the general notes in all fabrication drawings.			
3	A1			1 st comment	On hold areas are not reviewed. Contractor should resubmit these drawing with updated revision number for the Engineer's Approval after release all hold areas.			
4	A1			1 st comment	It is not accepted to submit under separate submittals (for example Submittal 92120 for part B and 92130 for part C,D and this submittal 92140 for part E) the same drawing number , same revision with the same or modifications without cloud. All the general details drawing / common details for hole steel deck should submit under one submission only considering the drawing revision as show on the attached markup drawing.			
5	A1			1 st comment	Refer to markup comments on the attached drawings.			



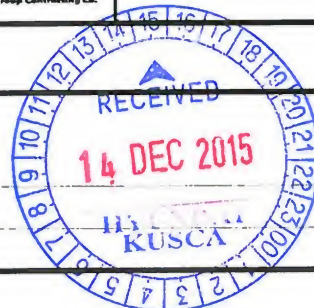
- 1) Category : Cat A = Agreed with response, Cat 0 = Observation / Note, Cat 1= Information Required Only, Cat 2= Major Comment / Revision Required
 2) Comment Rev.: 1st comment, 2nd comment...
 3) Comment Status after response: AA = Resolved, implemented and closed, BB = Resolved - not yet implemented, CC = Unresolved

Proj. No.: RA 140 DESIGN, BUILD, COMPLETE AND MAINTAIN SHEIKH JABER AL-AHMAD AL-SABAH CAUSEWAY PROJECT (MAIN LINK)	Employer: STATE OF KUWAIT MINISTRY OF PUBLIC WORKS 	Request No. RA140-HDC-22-CBR- DRW-0030-02
Engineer's Representative:  dar al-handasah shair and partners SSH TY-LIN INTERNATIONAL	Contractor:  HYUNDAI ENGINEERING & CONSTRUCTION CO., LTD. 	Date 16/11/2015

Transmittal of Design Drawing

1. Subject Description

Detailed Design - Main Bridge Superstructure



2. Submittal Details

Item Reference	Rev.	Description	Copies
RA140-22-BRG-CW-DW-34420	B2	Main Bridge Steel Deck (Middle Part) Drawing Package	1

NOTE

- Including comment & response sheet
- Including SYSTRA & HDEC-CGCC Quality Control & Quality Assurance Checklist

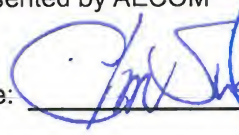


These are transmitted for:

- ☐ Your information
 ☒ Approval
 ☐ Checking
 ☐ Review and Comment

We certify that the above drawings have been designed by Systra and consented by AECOM

Submitted by : Chan Soo Park / Project Director

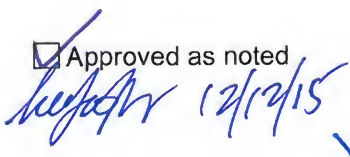
Signature: 



3. Engineer's Approval

– Refer to our comments on the attached comments and response sheets.

- ☐ Approved
 ☒ Approved as noted
 ☐ Revise and resubmit
 ☐ Rejected

Engineer's Signature: 

Date 14 / 12 / 2015

Approval shall not relieve Contractor of his liabilities under the Contract or constitute authorization of any change to Contract Documents.

RA140-HDC-22-CBR-DRW-0030-02

Proj. No.: RA 140 DESIGN, BUILD, COMPLETE AND MAINTAIN SHEIKH JABER AL-AHMAD AL-SABAH CAUSEWAY PROJECT (MAIN LINK)	Employer: STATE OF KUWAIT MINISTRY OF PUBLIC WORKS 	Request No. RA140-HDC-22-CBR- DRW-0050-03
Engineer's Representative:  dar al-handasah shair and partners SSH DESIGN TYLIN INTERNATIONAL	Contractor:  HYUNDAI ENGINEERING & CONSTRUCTION CO., LTD.  Combined Group Contracting Co.	Date 13/02/2016

Transmittal of Design Drawing

1. Subject Description

Detailed Design - Main Bridge Superstructure Drawing (Steel North Connection Part - B)

2. Submittal Details

Item Reference	Rev.	Description	Copies
RA140-22-BRG-CW-DW-34610	B2	Comment & Response for Main Bridge Steel Deck (North Connectionb Part - B) Drawing Package	1

These are transmitted for:

☐ Your information
 ☒ Approval
 ☐ Checking
 ☐ Review and Comment

We certify that the above drawings have been designed by Sysra and consented by AECOM

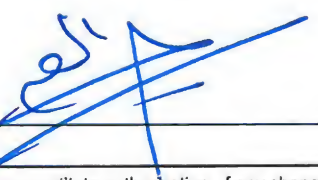
Submitted by : Chan Soo Park / Project Director

Signature: 

3. Engineer's Approval

– Refer to our comments on the attached comments and response sheets.

☒ Approved
 ☐ Approved as noted
 ☐ Revise and resubmit
 ☐ Rejected

Engineer's Signature: 

Date 21/2/2016

Approval shall not relieve Contractor of his liabilities under the Contract or constitute authorization of any change to Contract Documents.

RA140-HDC-22-CBR-DRW-0050-03

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

FOR FABRICATION- MAIN BRIDGE STEEL DECK (PART-E, NORTH CONNECTION PART-B)
SHOP DRAWING PACKAGE

Drawing package No.: RA140-32-BRG-CW-DW-92140-A1

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-GN-001	A	2016 02 25	MAIN BRIDGE	STEEL DECK	MARKING SYSTEM (1)	
RA140-22-BRG-SD-GN-002	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING PROCEDURE (1)	
RA140-22-BRG-SD-E-001	A	2016 02 25	MAIN BRIDGE	STEEL DECK	GENERAL ARRANGEMENT (1)	
RA140-22-BRG-SD-E-002	A	2016 02 25	MAIN BRIDGE	STEEL DECK	GENERAL ARRANGEMENT (2)	
RA140-22-BRG-SD-E-003	A	2016 02 25	MAIN BRIDGE	STEEL DECK	GENERAL ARRANGEMENT (3)	
RA140-22-BRG-SD-E-101	A	2016 02 25	MAIN BRIDGE	STEEL DECK	ERECTION DRAWING (1)	
RA140-22-BRG-SD-E-201	A	2016 02 25	MAIN BRIDGE	STEEL DECK	PRECAMBER TABLE (1)	
RA140-22-BRG-SD-E-301	A	2016 02 25	MAIN BRIDGE	STEEL DECK	COORDINATES OF CABLES ANCHORAGES (1)	
RA140-22-BRG-SD-WD-001	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING MAP (1)	
RA140-22-BRG-SD-WD-002	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING MAP (2)	
RA140-22-BRG-SD-WD-003	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING MAP (3)	
RA140-22-BRG-SD-WD-004	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING MAP (4)	
RA140-22-BRG-SD-WD-005	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING MAP (5)	
RA140-22-BRG-SD-WD-101	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (1)	
RA140-22-BRG-SD-WD-102	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (2)	
RA140-22-BRG-SD-WD-103	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (3)	
RA140-22-BRG-SD-WD-104	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (4)	
RA140-22-BRG-SD-WD-105	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (5)	
RA140-22-BRG-SD-WD-106	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (6)	
RA140-22-BRG-SD-WD-107	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (7)	
RA140-22-BRG-SD-WD-108	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (8)	
RA140-22-BRG-SD-WD-109	A	2016 02 25	MAIN BRIDGE	STEEL DECK	WELDING DETAIL (6)	
RA140-22-BRG-SD-STD-001	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STANDARD DETAIL (1)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-STD-002	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STANDARD DETAIL (2)	
RA140-22-BRG-SD-STD-003	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STANDARD DETAIL (3)	
RA140-22-BRG-SD-STD-101	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (1)	
RA140-22-BRG-SD-STD-102	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (2)	
RA140-22-BRG-SD-STD-103	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (3)	
RA140-22-BRG-SD-STD-104	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (4)	
RA140-22-BRG-SD-STD-105	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (5)	
RA140-22-BRG-SD-STD-106	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (6)	
RA140-22-BRG-SD-STD-107	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (7)	
RA140-22-BRG-SD-STD-108	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (8)	
RA140-22-BRG-SD-STD-109	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-A (9)	
RA140-22-BRG-SD-STD-111	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-B (1)	
RA140-22-BRG-SD-STD-112	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-B (2)	
RA140-22-BRG-SD-STD-113	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-B (3)	
RA140-22-BRG-SD-STD-114	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-B (4)	
RA140-22-BRG-SD-STD-121	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-C (1)	
RA140-22-BRG-SD-STD-122	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-C (2)	
RA140-22-BRG-SD-STD-123	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-C (3)	
RA140-22-BRG-SD-STD-124	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-C (4)	
RA140-22-BRG-SD-STD-125	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-C (5)	
RA140-22-BRG-SD-STD-131	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-D (1)	
RA140-22-BRG-SD-STD-141	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (1)	
RA140-22-BRG-SD-STD-142	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (2)	
RA140-22-BRG-SD-STD-143	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (3)	
RA140-22-BRG-SD-STD-144	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (4)	
RA140-22-BRG-SD-STD-145	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (5)	
RA140-22-BRG-SD-STD-146	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (6)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-STD-147	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (7)	
RA140-22-BRG-SD-STD-148	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (8)	
RA140-22-BRG-SD-STD-149	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-ETC (9)	
RA140-22-BRG-SD-STD-181	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-E (1)	
RA140-22-BRG-SD-STD-182	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-E (2)	
RA140-22-BRG-SD-STD-183	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-E (3)	
RA140-22-BRG-SD-STD-184	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-E (4)	
RA140-22-BRG-SD-STD-191	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-F (1)	
RA140-22-BRG-SD-STD-192	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-F (2)	
RA140-22-BRG-SD-STD-193	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-F (3)	
RA140-22-BRG-SD-STD-194	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-F (4)	
RA140-22-BRG-SD-STD-195	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SHOP CONNECTION DETAIL-F (5)	
RA140-22-BRG-SD-STD-201	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-A (1)	
RA140-22-BRG-SD-STD-211	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-B (1)	
RA140-22-BRG-SD-STD-221	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-C (1)	
RA140-22-BRG-SD-STD-231	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-D (1)	
RA140-22-BRG-SD-STD-241	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-E (1)	
RA140-22-BRG-SD-STD-242	A	2016 02 25	MAIN BRIDGE	STEEL DECK	FIELD CONNECTION DETAIL-E (2)	
RA140-22-BRG-SD-STD-301	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SPLICE DETAIL (1)	
RA140-22-BRG-SD-STD-302	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SPLICE DETAIL (2)	
RA140-22-BRG-SD-STD-303	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SPLICE DETAIL (3)	
RA140-22-BRG-SD-STD-304	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SPLICE DETAIL (4)	
RA140-22-BRG-SD-STD-305	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SPLICE DETAIL (5)	
RA140-22-BRG-SD-STD-401	A	2016 02 25	MAIN BRIDGE	STEEL DECK	DRAINAGE SPOUT ARRANGEMENT (1)	
RA140-22-BRG-SD-STD-402	A	2016 02 25	MAIN BRIDGE	STEEL DECK	DRAINAGE SPOUT DETAIL (1)	
RA140-22-BRG-SD-STD-451	A	2016 02 25	MAIN BRIDGE	STEEL DECK	DOOR DETAIL (1)	
RA140-22-BRG-SD-SEC-001	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D01" (1)	

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-SEC-002	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D01" (2)	
RA140-22-BRG-SD-SEC-003	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D01" (3)	
RA140-22-BRG-SD-SEC-004	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D02" (1)	
RA140-22-BRG-SD-SEC-005	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D02" (2)	
RA140-22-BRG-SD-SEC-006	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D02" (3)	
RA140-22-BRG-SD-SEC-007	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D03" (1)	
RA140-22-BRG-SD-SEC-008	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D03" (2)	
RA140-22-BRG-SD-SEC-009	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D03" (3)	
RA140-22-BRG-SD-SEC-010	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D04" (1)	
RA140-22-BRG-SD-SEC-011	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D04" (2)	
RA140-22-BRG-SD-SEC-012	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D04" (3)	
RA140-22-BRG-SD-SEC-013	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D05" (1)	
RA140-22-BRG-SD-SEC-014	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D05" (2)	
RA140-22-BRG-SD-SEC-015	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D05" (3)	
RA140-22-BRG-SD-SEC-016	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D06" (1)	
RA140-22-BRG-SD-SEC-017	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D06" (2)	
RA140-22-BRG-SD-SEC-018	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D06" (3)	
RA140-22-BRG-SD-SEC-019	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D07" (1)	
RA140-22-BRG-SD-SEC-020	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D07" (2)	
RA140-22-BRG-SD-SEC-021	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D07" (3)	
RA140-22-BRG-SD-SEC-022	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D08" (1)	
RA140-22-BRG-SD-SEC-023	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D08" (2)	
RA140-22-BRG-SD-SEC-024	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D08" (3)	
RA140-22-BRG-SD-SEC-025	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D09" (1)	
RA140-22-BRG-SD-SEC-026	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D09" (2)	
RA140-22-BRG-SD-SEC-027	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D09" (3)	
RA140-22-BRG-SD-SEC-101	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D21" (1)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-SEC-102	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D21" (2)	
RA140-22-BRG-SD-SEC-103	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D21" (3)	
RA140-22-BRG-SD-SEC-104	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D22" (1)	
RA140-22-BRG-SD-SEC-105	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D22" (2)	
RA140-22-BRG-SD-SEC-106	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D22" (3)	
RA140-22-BRG-SD-SEC-107	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D23" (1)	
RA140-22-BRG-SD-SEC-108	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D23" (2)	
RA140-22-BRG-SD-SEC-109	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D23" (3)	
RA140-22-BRG-SD-SEC-110	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D24" (1)	
RA140-22-BRG-SD-SEC-111	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D24" (2)	
RA140-22-BRG-SD-SEC-112	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D24" (3)	
RA140-22-BRG-SD-SEC-113	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D25" (1)	
RA140-22-BRG-SD-SEC-114	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D25" (2)	
RA140-22-BRG-SD-SEC-115	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D25" (3)	
RA140-22-BRG-SD-SEC-116	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D26" (1)	
RA140-22-BRG-SD-SEC-117	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D26" (2)	
RA140-22-BRG-SD-SEC-118	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "D26" (3)	
RA140-22-BRG-SD-SEC-201	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C01W" (1)	
RA140-22-BRG-SD-SEC-202	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C01E" (1)	
RA140-22-BRG-SD-SEC-203	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C02W" (1)	
RA140-22-BRG-SD-SEC-204	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C02E" (1)	
RA140-22-BRG-SD-SEC-205	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C03W" (1)	
RA140-22-BRG-SD-SEC-206	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C03E" (1)	
RA140-22-BRG-SD-SEC-221	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21W" (1)	
RA140-22-BRG-SD-SEC-222	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21W" (2)	
RA140-22-BRG-SD-SEC-223	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21W" (3)	
RA140-22-BRG-SD-SEC-224	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21E" (1)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-SEC-225	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21E" (2)	
RA140-22-BRG-SD-SEC-226	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C21E" (3)	
RA140-22-BRG-SD-SEC-227	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22W" (1)	
RA140-22-BRG-SD-SEC-228	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22W" (2)	
RA140-22-BRG-SD-SEC-229	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22W" (3)	
RA140-22-BRG-SD-SEC-230	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22E" (1)	
RA140-22-BRG-SD-SEC-231	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22E" (2)	
RA140-22-BRG-SD-SEC-232	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C22E" (3)	
RA140-22-BRG-SD-SEC-233	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23WA / B" (1)	
RA140-22-BRG-SD-SEC-234	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23WA / B" (2)	
RA140-22-BRG-SD-SEC-235	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23WA / B" (3)	
RA140-22-BRG-SD-SEC-236	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23WA / B" (4)	
RA140-22-BRG-SD-SEC-237	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23EA / B" (1)	
RA140-22-BRG-SD-SEC-238	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23EA / B" (2)	
RA140-22-BRG-SD-SEC-239	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23EA / B" (3)	
RA140-22-BRG-SD-SEC-240	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C23EA / B" (4)	
RA140-22-BRG-SD-SEC-241	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C24W" (1)	
RA140-22-BRG-SD-SEC-242	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C24W" (2)	
RA140-22-BRG-SD-SEC-243	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C24E" (1)	
RA140-22-BRG-SD-SEC-244	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C24E" (2)	
RA140-22-BRG-SD-SEC-245	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25WA / B" (1)	
RA140-22-BRG-SD-SEC-246	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25WA / B" (2)	
RA140-22-BRG-SD-SEC-247	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25WA / B" (3)	
RA140-22-BRG-SD-SEC-248	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25WA / B" (4)	
RA140-22-BRG-SD-SEC-249	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25EA / B" (1)	
RA140-22-BRG-SD-SEC-250	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25EA / B" (2)	
RA140-22-BRG-SD-SEC-251	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25EA / B" (3)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-SEC-252	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C25EA / B" (4)	
RA140-22-BRG-SD-SEC-253	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26WA / B" (1)	
RA140-22-BRG-SD-SEC-254	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26WA / B" (2)	
RA140-22-BRG-SD-SEC-255	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26WA / B" (3)	
RA140-22-BRG-SD-SEC-256	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26WA / B" (4)	
RA140-22-BRG-SD-SEC-257	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26EA / B" (1)	
RA140-22-BRG-SD-SEC-258	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26EA / B" (2)	
RA140-22-BRG-SD-SEC-259	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26EA / B" (3)	
RA140-22-BRG-SD-SEC-260	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C26EA / B" (4)	
RA140-22-BRG-SD-SEC-401	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41W" (1)	
RA140-22-BRG-SD-SEC-402	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41W" (2)	
RA140-22-BRG-SD-SEC-403	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41W" (3)	
RA140-22-BRG-SD-SEC-404	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41E" (1)	
RA140-22-BRG-SD-SEC-405	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41E" (2)	
RA140-22-BRG-SD-SEC-406	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C41E" (3)	
RA140-22-BRG-SD-SEC-407	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42W" (1)	
RA140-22-BRG-SD-SEC-408	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42W" (2)	
RA140-22-BRG-SD-SEC-409	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42W" (3)	
RA140-22-BRG-SD-SEC-410	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42E" (1)	
RA140-22-BRG-SD-SEC-411	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42E" (2)	
RA140-22-BRG-SD-SEC-412	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C42E" (3)	
RA140-22-BRG-SD-SEC-501	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C51" (1)	
RA140-22-BRG-SD-SEC-502	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C51" (2)	
RA140-22-BRG-SD-SEC-503	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C51" (3)	
RA140-22-BRG-SD-SEC-504	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C52" (1)	
RA140-22-BRG-SD-SEC-505	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C52" (2)	
RA140-22-BRG-SD-SEC-506	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C52" (3)	

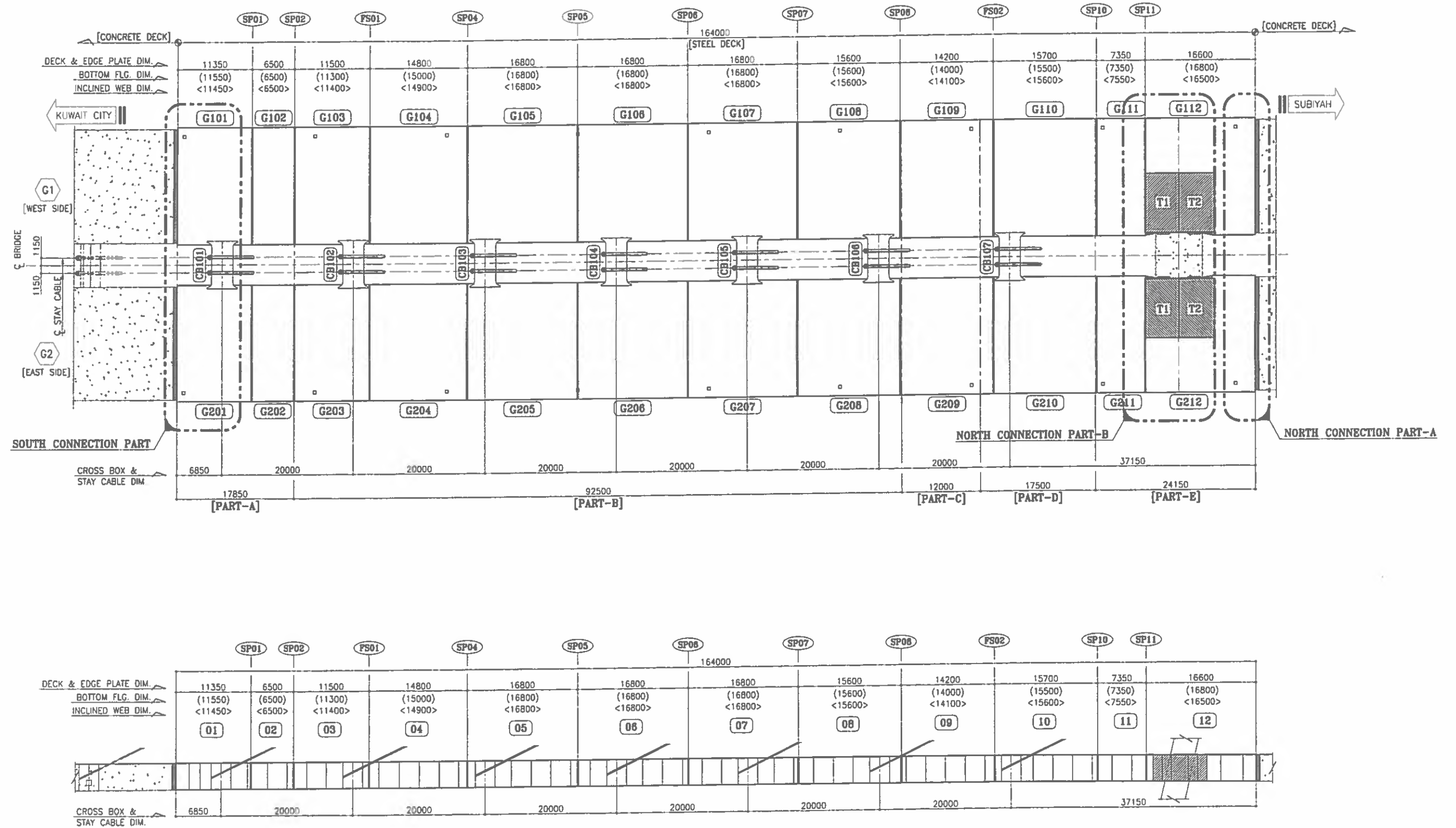
Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-SEC-507	A	2016 02 25	MAIN BRIDGE	STEEL DECK	SECTION DETAIL "C52" (4)	
RA140-22-BRG-SD-D-112T1a	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (1)	
RA140-22-BRG-SD-D-112T1b	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (2)	
RA140-22-BRG-SD-D-112T1c	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (3)	
RA140-22-BRG-SD-D-112T1d	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (4)	
RA140-22-BRG-SD-D-112T1e	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (5)	
RA140-22-BRG-SD-D-112T1f	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (6)	
RA140-22-BRG-SD-D-112T1g	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (7)	
RA140-22-BRG-SD-D-112T1h	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (8)	
RA140-22-BRG-SD-D-112T1j	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (9)	
RA140-22-BRG-SD-D-112T1k	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (10)	
RA140-22-BRG-SD-D-112T1m	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (11)	
RA140-22-BRG-SD-D-112T1n	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (12)	
RA140-22-BRG-SD-D-112T1p	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T1" (13)	
RA140-22-BRG-SD-D-112T2a	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (1)	
RA140-22-BRG-SD-D-112T2b	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (2)	
RA140-22-BRG-SD-D-112T2c	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (3)	
RA140-22-BRG-SD-D-112T2d	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (4)	
RA140-22-BRG-SD-D-112T2e	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (5)	
RA140-22-BRG-SD-D-112T2f	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (6)	
RA140-22-BRG-SD-D-112T2g	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (7)	
RA140-22-BRG-SD-D-112T2h	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (8)	
RA140-22-BRG-SD-D-112T2j	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (9)	
RA140-22-BRG-SD-D-112T2k	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (10)	
RA140-22-BRG-SD-D-112T2m	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (11)	
RA140-22-BRG-SD-D-112T2n	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (12)	
RA140-22-BRG-SD-D-112T2p	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G112T2" (13)	

Sheikh Jaber Al-Ahmad Al-Sabah Causeway Project
Main Link – Contract RA/140

Code	Revision	Date	Title 1	Title 2	Title 3	Comment
RA140-22-BRG-SD-D-212T1a	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (1)	
RA140-22-BRG-SD-D-212T1b	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (2)	
RA140-22-BRG-SD-D-212T1c	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (3)	
RA140-22-BRG-SD-D-212T1d	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (4)	
RA140-22-BRG-SD-D-212T1e	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (5)	
RA140-22-BRG-SD-D-212T1f	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (6)	
RA140-22-BRG-SD-D-212T1g	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (7)	
RA140-22-BRG-SD-D-212T1h	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (8)	
RA140-22-BRG-SD-D-212T1j	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (9)	
RA140-22-BRG-SD-D-212T1k	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (10)	
RA140-22-BRG-SD-D-212T1m	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (11)	
RA140-22-BRG-SD-D-212T1n	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (12)	
RA140-22-BRG-SD-D-212T1p	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T1" (13)	
RA140-22-BRG-SD-D-212T2a	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (1)	
RA140-22-BRG-SD-D-212T2b	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (2)	
RA140-22-BRG-SD-D-212T2c	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (3)	
RA140-22-BRG-SD-D-212T2d	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (4)	
RA140-22-BRG-SD-D-212T2e	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (5)	
RA140-22-BRG-SD-D-212T2f	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (6)	
RA140-22-BRG-SD-D-212T2g	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (7)	
RA140-22-BRG-SD-D-212T2h	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (8)	
RA140-22-BRG-SD-D-212T2j	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (9)	
RA140-22-BRG-SD-D-212T2k	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (10)	
RA140-22-BRG-SD-D-212T2m	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (11)	
RA140-22-BRG-SD-D-212T2n	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (12)	
RA140-22-BRG-SD-D-212T2p	A	2016 02 25	MAIN BRIDGE	STEEL DECK	STEEL DECK DETAIL "G212T2" (13)	

INDEX DRAWING



A. DRAWING NO. SYSTEM

1) DRAWING NO. CODE

ex) RA140-22-BRG - SD - GN - 001
 KUSCA MAIN BRIDGE - DWG. MARK
 NAME INITIAL
 SD : STEEL DECK

NO.	ITEM	DWG. MK.	SERIAL NO.
1	DRAWING INDEX	DL	001 ~
2	MARKING SYSTEM	GN	001 ~
3	GENERAL ARRANGEMENT, ERECTION DRAWING	E	001 ~
4	CAMBER DIAGRAM	E	201 ~
5	WELDING MAP	WD	001 ~
6	STANDARD DETAIL	STD	001 ~
7	SECTION DETAIL	SEC	001 ~
8	STEEL DECK DETAIL	D	101 ~
9	CROSS BEAM DETAIL	D	201 ~
10	KERB DETAIL	D	301 ~
11	DRAINAGE SPOUT ARRANGEMENT	D	401 ~
12	ERECTION TABLE	ET	01 ~

B. MARKING SYSTEM

1) MAIN BLOCK MARK (SHIPPING MARK)

ex) G 1 01
 SERIAL NO.
 STEEL DECK DIRECTION
 1 : WEST SIDE
 2 : EAST SIDE
 NAME INITIAL
 G : STEEL DECK

2) SUB PART MARK

ex) C 1 01
 SERIAL NO.
 TRANSVERSE DIRECTION
 1 : WEST SIDE
 2 : EAST SIDE
 BLANK : CENTER
 NAME INITIAL
 C : CROSS BOX
 K : KERB

3) PIECE MARK

ex) FUP 01 E A
 SERIAL NO.
 TRANSVERSE DIRECTION
 E : EAST
 W : WEST
 BLANK : ETC.
 SERIAL NO.

DIVISION	ITEM	CODE
1. STEEL DECK	DECK PLATE	FUP
	LOWER FLANGE	FLP
	LEFT INCLINED WEB	WLP
	RIGHT INCLINED WEB	WRP
	LEFT EDGE FLANGE	ELP
	RIGHT EDGE FLANGE	ERP
	U-RIB (UPPER PART)	URU
	U-RIB (LOWER PART)	URL
	U-RIB (INCLINED PART)	URI
	I-RIB (UPPER PART)	IRU
	I-RIB (EDGE PART)	IRE
	ACCESS HOLE PLATE (INCLINED PART)	IRP
2. CROSS BOX	CROSS BOX FLANGE	CBF
	CROSS BOX WEB PLATE	CBW
	U-RIB (UPPER PART)	CURU
	U-RIB (LOWER PART)	CURL
	U-RIB (WEB PART)	CURW
	DIAPHRAGM	CDPP
	ACCESS HOLE PLATE (DIAPHRAGM)	CDRP
	FORMWORK TUBE	CFWT
	FORMWORK TUBE - BEARING PLATE	CFBP
	FORMWORK TUBE - END PLATE	CFEP
	FORMWORK TUBE - STIFFENER	CFVP
3. DIAPHRAGM	TRANS. BEAM WEB (UPPER PART)	BWU
	TRANS. BEAM FLANGE (UPPER PART)	BFU
	TRANS. BEAM WEB (LOWER PART)	BWL
	TRANS. BEAM FLANGE (LOWER PART)	BFL
	TRANS. BEAM WEB (INCLINED PART)	BWI
	TRANS. BEAM FLANGE (INCLINED PART)	BFI
	TRANS. BEAM WEB (EDGE PART)	BWE
	TRANS. BEAM FLANGE (EDGE PART)	BFE
	TRANS. BEAM VERTICAL STIFFENER (UPPER PART)	VSU
	TRANS. BEAM VERTICAL STIFFENER (LOWER PART)	VSL
	DIAPHRAGM	DPP
	DIAPHRAGM - VERTICAL STIFFENER	DVP
	ACCESS HOLE PLATE (DIAPHRAGM)	DRP
	DIAGONAL BRACING TUBE	DBP
	UPPER GUSSET PLATE	UGP
	LOWER GUSSET PLATE	LGP
	INCLINED GUSSET PLATE	IGP
4. KERB	KERB PLATE	DKP
5. ETC	LIFTING LUG	LLP

C. CONNECTION PART

ex) CBS 01
 SERIAL NO.

DIVISION	ITEM	CODE
1. CONNECTION PART	BACKING STRIP	CBS
	COVER PLATE	ECP
	U-RIB CONN.	CUS
	I-RIB CONN.	CIS
	KERB CONN.	CKS

D. MATERIALS

1. ALL STRUCTURAL STEEL WILL BE GRADE A709M, UNLESS NOTED OTHERWISE

NO	ITEM	MATERIAL
1	PLATE	A709M Gr.345
2	DIAGONAL BRACING TUBE	A500 Gr.345
3	BOTL	A325M Type1
4	NUT	A536M Class 10s

E. BOLT

MARK	LENGTH
a	50
b	55
c	60
d	65
e	70
f	75
g	80
h	85
k	90
m	95
n	100
p	105
r	110
s	115
t	120
u	125
v	130
w	135
x	140
y	145
z	150

BOLT	SERIAL NO.
H.T.B M16	1
H.T.B M20	2
H.T.B M22	3
H.T.B M24	4
C.B M12	5
C.B M16	6
C.B M20	7

3 x 12 - H.T.B. M22 x 65
 BOLT SIZE MARK - LENGTH MK.

Add Painting
 System
 as per Project
 Par. Specifications

FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
1	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHOI

EMPLOYER
 STATE OF KUWAIT
 MINISTRY OF PUBLIC WORKS
 ROADS ADMINISTRATION

PROJECT TITLE
 SHEIKH JABER AL AHMAD AL SABAH
 CAUSEWAY PROJECT (MAIN LINK)
 CONTRACT RA/140

DRAWING TITLE
 MAIN BRIDGE
 STEEL DECK
 MARKING SYSTEM (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
 HYUNDAI ENGINEERING & CONSTRUCTION
 Combined Group

FOR APPROVAL
 2016.02.25
 HYUNDAI E&S
 YOUNGCHON

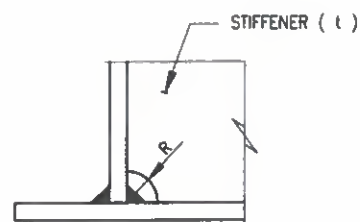
DRAWING NO.
 RA140-22-BRG-SD-GN-001

WELDING PROCEDURE

(unless noted on the detailing drawing)

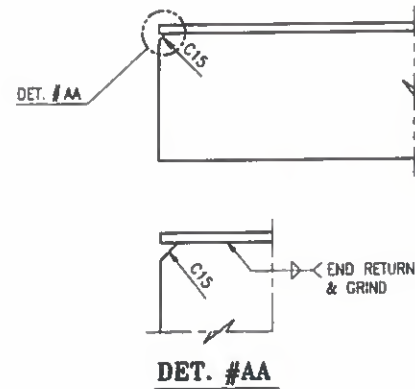
SCALLOPS

STIFFENER & DIAPHRAGM



t (mm)	R (mm)
$t \leq 16$	35
$16 < t \leq 40$	40
$40 \leq t$	$t + 25$

PLATE EDGE DETAIL



- THE PLATE EDGES (C15 CHAMFERING PARTS) SHALL BE PROPERLY FILLED WITH WELD.
- ALL FILLET WELDS TO BE CONTINUOUS AROUND ENDS AND EDGES OF PLATE.

WELDING SYMBOL

PARTIAL JOINT PENETRATION

S(E)	R	P.J.P
S	GROOVE DEPTH	
E	WELD DEPTH	
R	GROOVE ANGLE	

"BACKING STRIP" MATERIAL

C	CERAMIC
S	STEEL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
WELDING PROCEDURE (1)

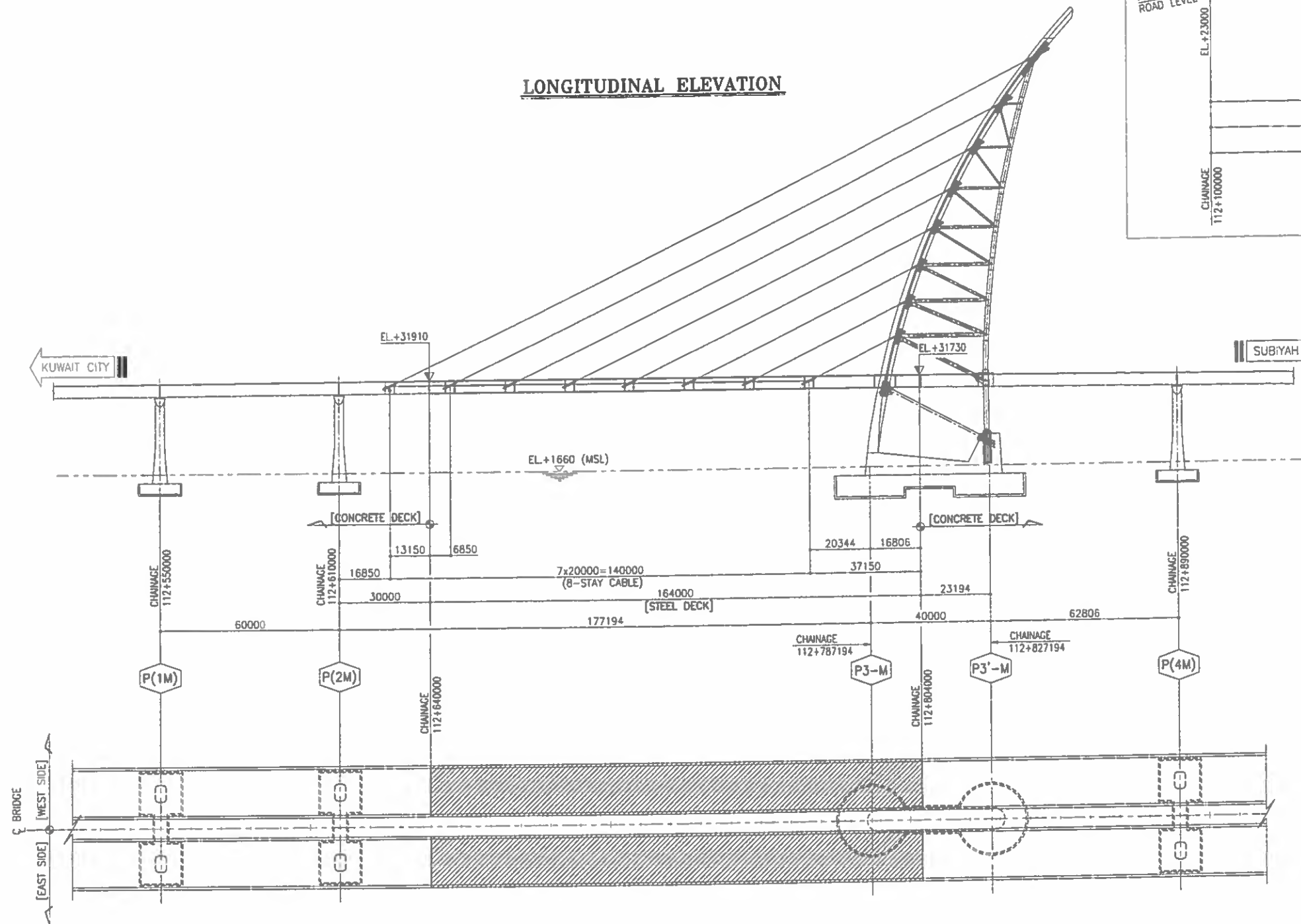
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION
Combined Group
Consulting Company

DRAWING NO.
RA140-22-BRG-SD-GN-002

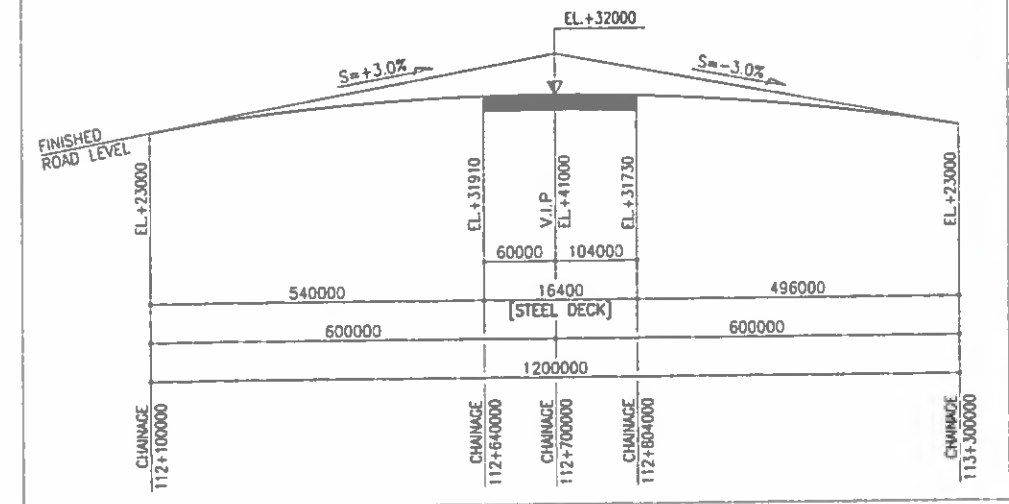
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

LONGITUDINAL ELEVATION



SITUATION

LONGITUDINAL PROFILE



Provide reference drawing no. / Approved drawing for levels, stations and slopes

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
1	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONH	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
GENERAL ARRANGEMENT (1)**

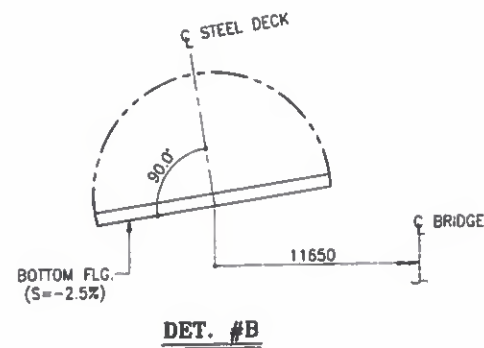
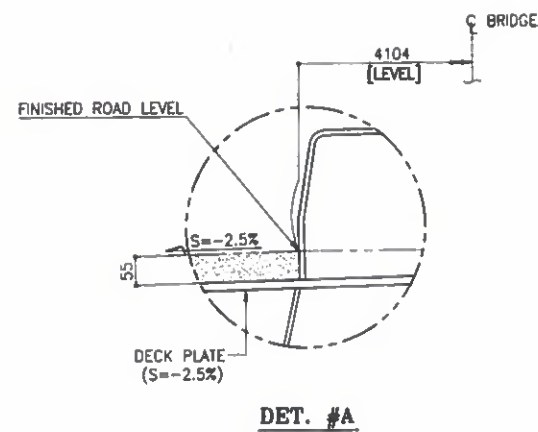
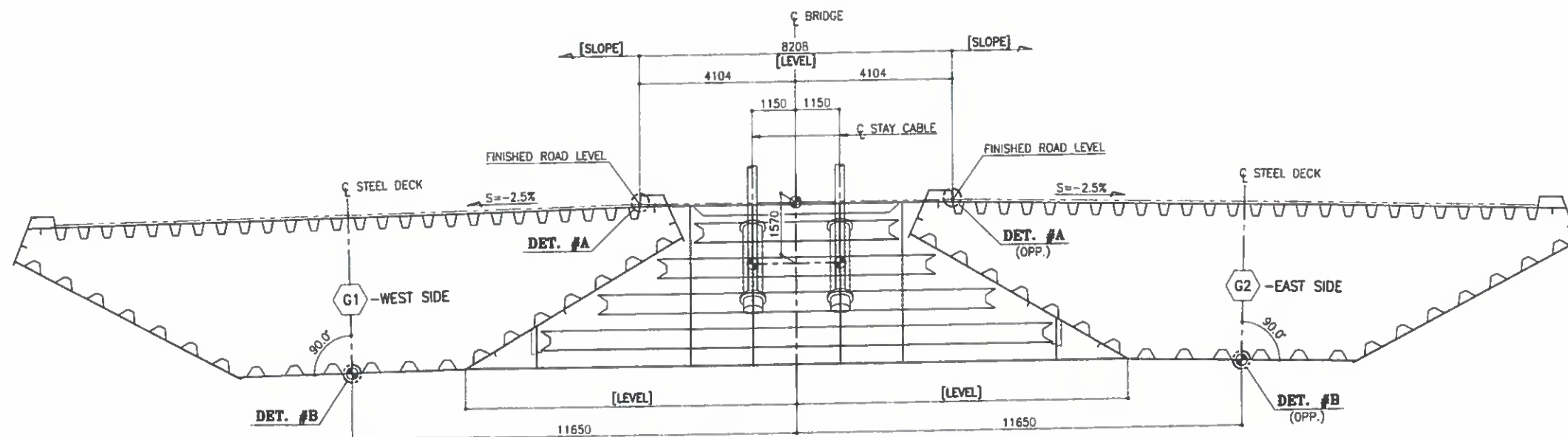
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHON	S.S.SONH	S.M.KHON

DATE ISSUED
2016.02.25
CONTRACTOR
HYUNDAI E&S IYOULCHON

DRAWING NO.
RA140-22-BRG-SD-E-001

FOR APPROVAL
2016.02.25
HYUNDAI E&S IYOULCHON

TYPICAL CROSS SECTION



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
2016.02.25		FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
GENERAL ARRANGEMENT (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

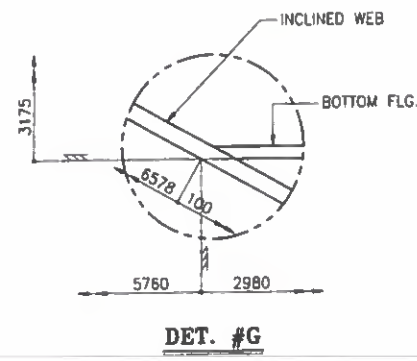
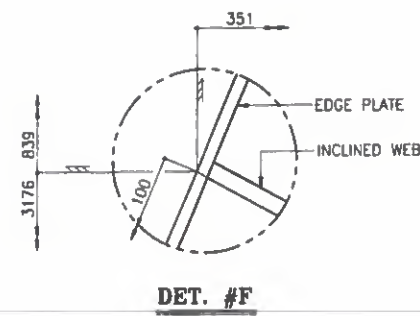
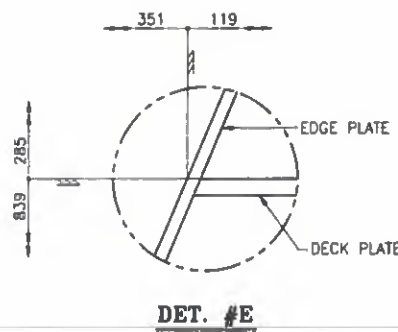
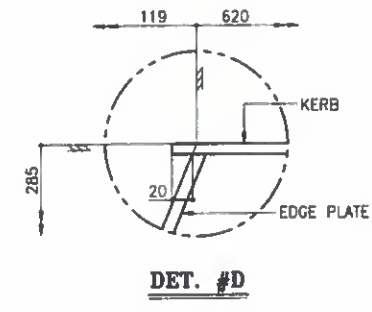
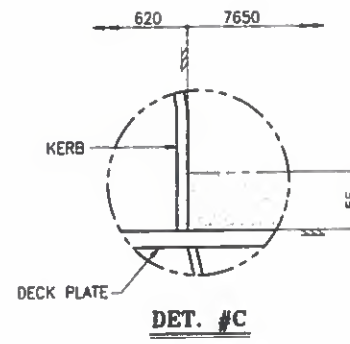
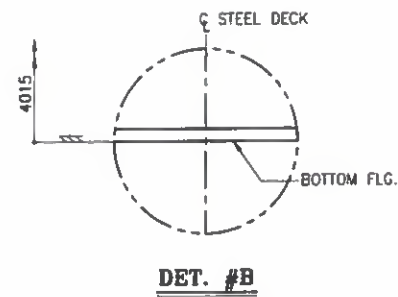
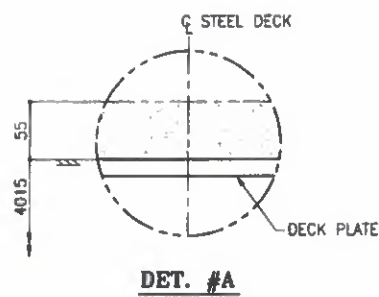
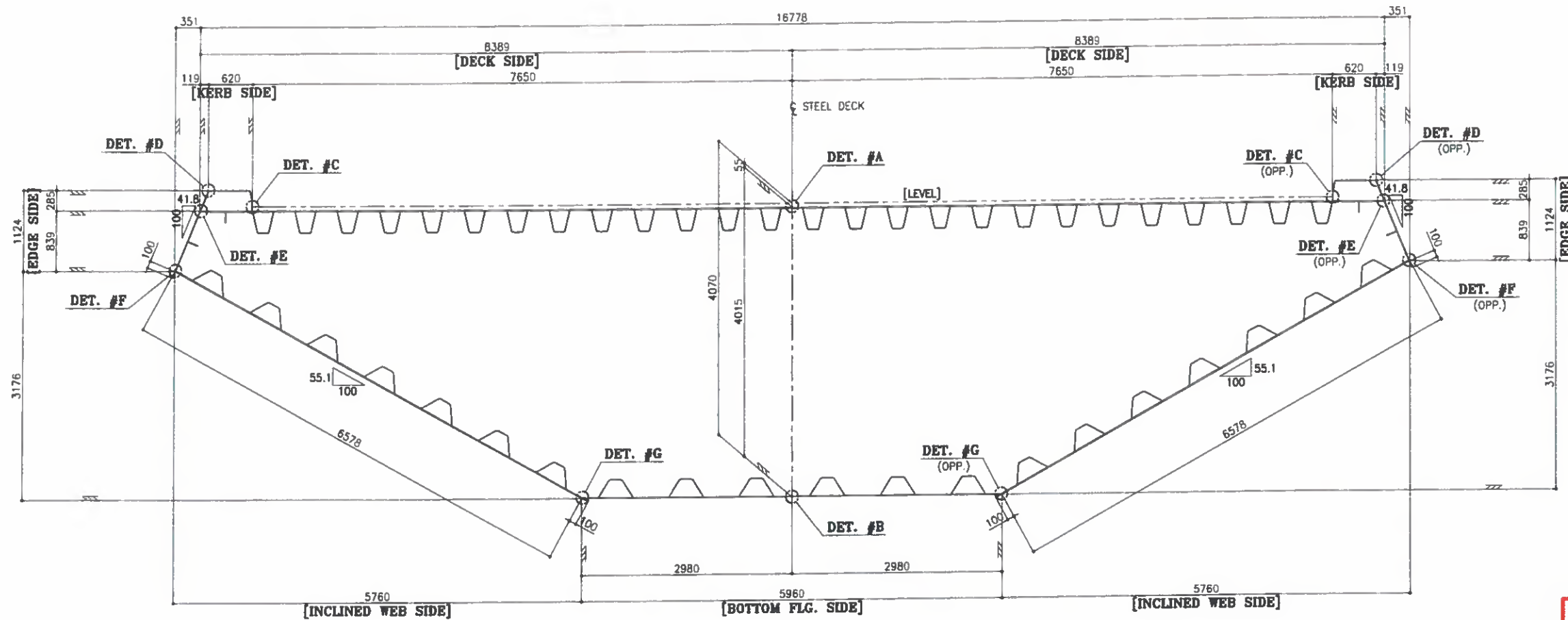
HYUNDAI **Combined Group**
Engineering & Construction

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-E-002

REV.
A

TYPICAL CROSS SECTION COORDINATE



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
GENERAL ARRANGEMENT (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

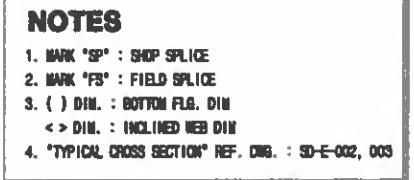
DRAWING NO.
RA140-22-BRG-SD-E-003

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

*. All dimensions : Except X-Comber



H O L D

EMPLOYER

PROJECT TITLE

DRAWING TITLE

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
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CONTRACTOR	
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DRAWING NO.	REV.
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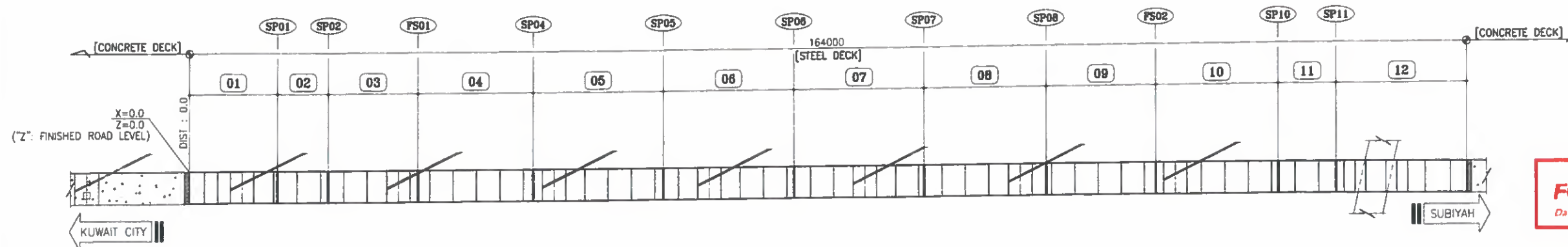
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This drawing is submitted under Part B, C & d with Rev. "A"
The clouded area changed
Updated to Rev. B

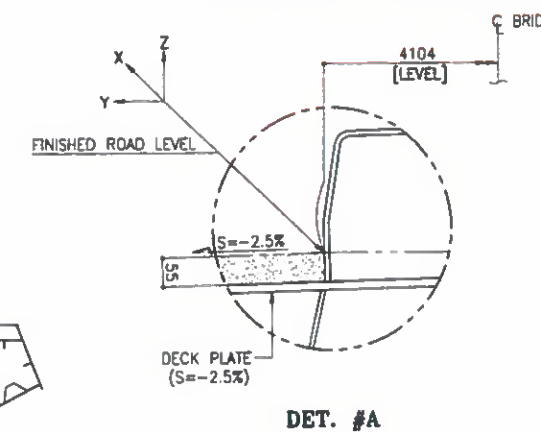
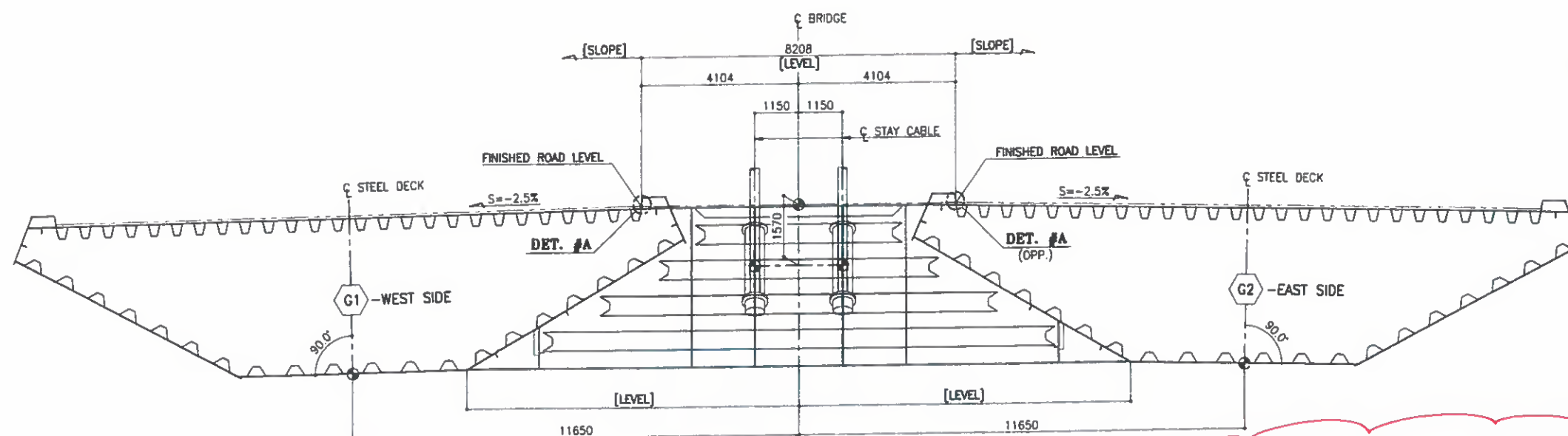
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

B

PRECAMBER



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



TYPICAL CROSS SECTION

NOTES

1. "FINISHED ROAD LEVEL" REF. DIS. : SD-E-002

Provide Reference for all approved precamber values

PRECAMBER TABLE

RECOMBER TABLE																					
DIST (m)	0.000	1.100	3.225	5.350	6.850	8.350	10.475	14.725	17.850	18.975	21.100	25.350	26.850	28.350	30.000	32.600	36.850	41.100	45.350	46.000	46.850
X (m)	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.004	0.004	0.004	0.005	0.006	0.007	0.008	0.008	0.008
Z (m)	0.000	0.006	0.018	0.028	0.035	0.043	0.054	0.074	0.088	0.092	0.100	0.115	0.119	0.125	0.131	0.140	0.153	0.164	0.172	0.173	0.175

DIST (m)	48.350	52.600	56.850	60.000	61.100	65.350	66.850	68.350	72.600	76.850	81.100	85.350	86.850	88.350	92.600	96.850	101.100	105.350	106.850	108.350	112.600
X (m)	0.008	0.009	0.010	0.011	0.012	0.013	0.013	0.014	0.015	0.016	0.018	0.019	0.020	0.020	0.022	0.023	0.025	0.026	0.027	0.027	0.029
Z (m)	0.179	0.188	0.195	0.199	0.200	0.203	0.203	0.205	0.208	0.208	0.207	0.203	0.201	0.200	0.195	0.189	0.180	0.169	0.165	0.161	0.150

DIST (m)	116.850	121.100	122.350	123.225	124.750	125.350	126.850	128.350	132.600	136.850	139.850	141.100	143.100	145.100	147.194	149.100	151.087	152.640	154.687	156.500	158.000	164.000
X (m)	0.030	0.031	0.032	0.032	0.032	0.033	0.033	0.033	0.034	0.035	0.036	0.036	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.039
Z (m)	0.138	0.124	0.120	0.117	0.112	0.110	0.105	0.101	0.087	0.073	0.063	0.059	0.053	0.046	0.039	0.033	0.027	0.022	0.018	0.015	0.012	0.000

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

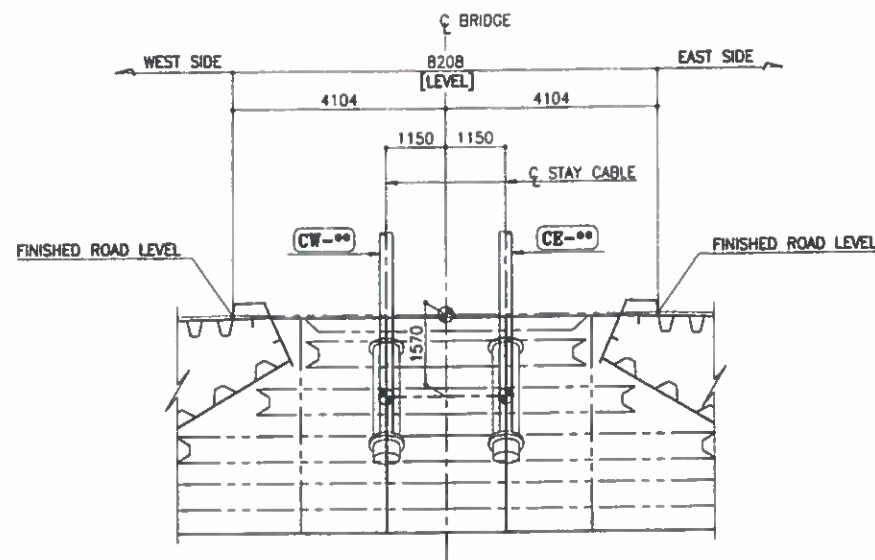
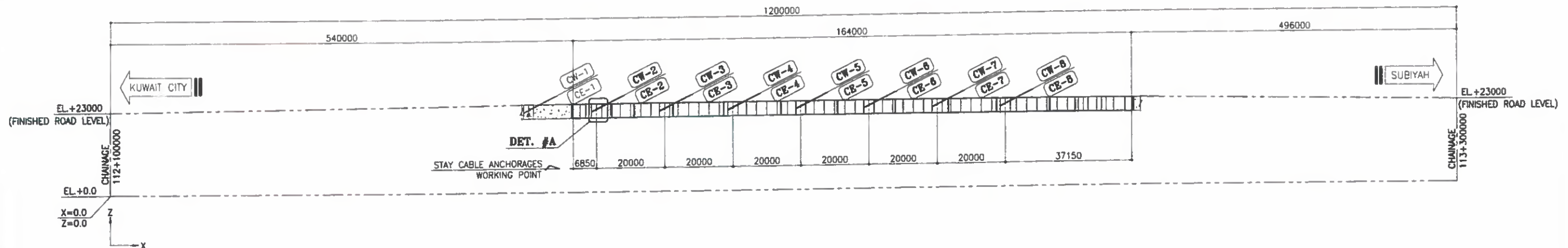
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	DATE	DATE	DATE	DATE
2016.02.25	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

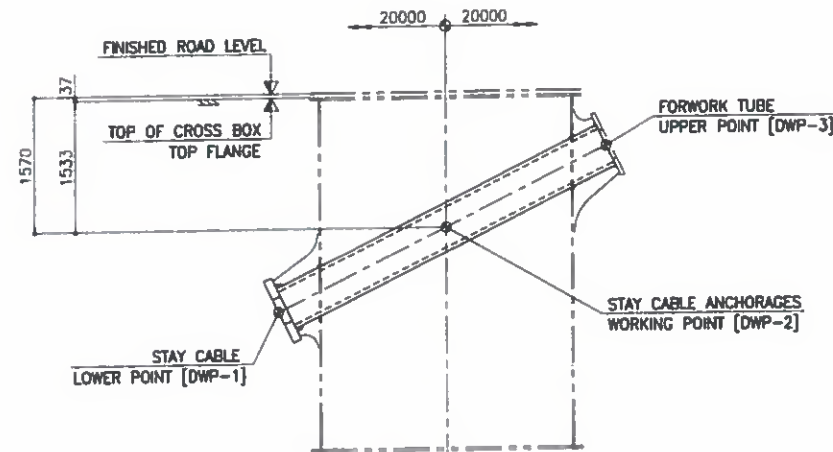
BUILDING NO.
RA140-22-BRG-SD-E-201

REV. A

COORDINATES OF CABLES ANCHORAGES



TYPICAL CROSS SECTION



DET. #A

STAY CABLE LOWER POINT
[DWP-1]

STAY CABLE NO.	X (m)	Z (m)
CW-2 / CE-2	544.860	29.422
CW-3 / CE-3	564.860	29.460
CW-4 / CE-4	584.860	29.480
CW-5 / CE-5	604.860	29.481
CW-6 / CE-6	624.860	29.460
CW-7 / CE-7	644.860	29.420
CW-8 / CE-8	664.860	29.357

STAY CABLE ANCHORAGES WORKING POINT
[DWP-2]

STAY CABLE NO.	X (m)	Z (m)
CW-2 / CE-2	546.850	30.359
CW-3 / CE-3	566.850	30.403
CW-4 / CE-4	586.850	30.426
CW-5 / CE-5	606.850	30.429
CW-6 / CE-6	626.850	30.412
CW-7 / CE-7	646.850	30.375
CW-8 / CE-8	666.850	30.318

FORWORK TUBE UPPER POINT
[DWP-3]

STAY CABLE NO.	X (m)	Z (m)
CW-2 / CE-2	548.840	31.297
CW-3 / CE-3	568.836	31.343
CW-4 / CE-4	588.835	31.369
CW-5 / CE-5	608.833	31.373
CW-6 / CE-6	628.830	31.359
CW-7 / CE-7	648.827	31.324
CW-8 / CE-8	668.823	31.271

*. All data is the coordinate after completion of the bridge.

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. "FINISHED ROAD LEVEL" REF. Dwg. : SD-E-002

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
1	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
COORDINATES OF CABLES ANCHORAGES (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

DATE ISSUED: 2016.02.25 2016.02.25 2016.02.25 2016.02.25

CONTRACTOR
HYUNDAI E&S
HYUNDAI E&S
HYUNDAI E&S

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-E-301

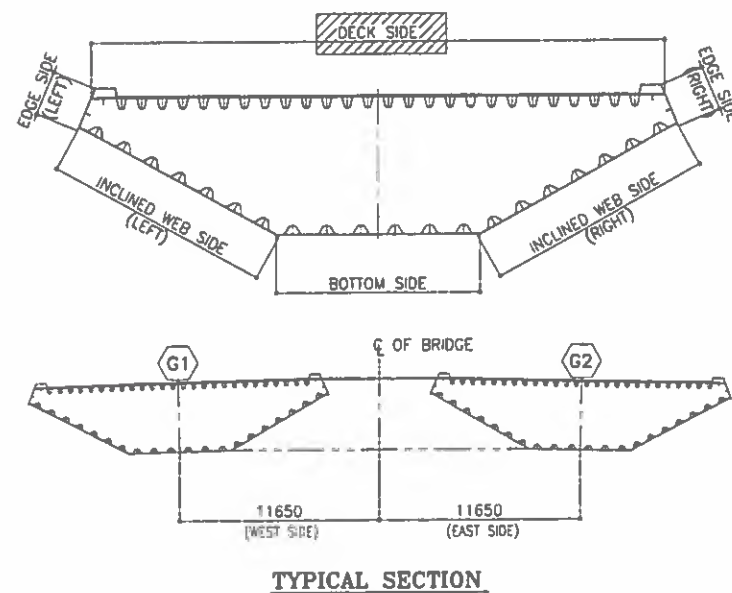
Refer To Comments
on Dwg. SD-E-101
& Dwg. SD-E-201

WELDING MAP (DECK SIDE)

HOLD

SP01		SP02		FS01		SP04		SP05		SP06		SP07		SP08		FS02		SP10		SP11	
18t	18t	18t		18t		18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	
W101-FU-5 (W1818-1)		W102-FU-5 (W1818-1)		W103-FU-5 (W1818F)		W104-FU-5 (W1818-1)		W105-FU-5 (W1818-1)		W106-FU-5 (W1818-1)		W107-FU-5 (W1818-1)		W108-FU-5 (W1818-1)		W109-FU-5 (W1818F)		W110-FU-5 (W1818-1)		W111-FU-5 (W1818-1)	
W101-FU-1 (W1818)		W102-FU-1 (W1818)		W103-FU-1 (W1818)		W104-FU-1 (W1818)		W105-FU-1 (W1818)		W106-FU-1 (W1818)		W107-FU-1 (W1818)		W108-FU-1 (W1818)		W109-FU-1 (W1818)		W110-FU-1 (W1818)		W111-FU-1 (W1818)	
W101-FU-2 (W1818-1)		W102-FU-2 (W1818-1)		W103-FU-2 (W1818-1)		W104-FU-2 (W1818-1)		W105-FU-2 (W1818-1)		W106-FU-2 (W1818-1)		W107-FU-2 (W1818-1)		W108-FU-2 (W1818-1)		W109-FU-2 (W1818-1)		W110-FU-2 (W1818-1)		W111-FU-2 (W1818-1)	
W101-FU-3 (W1818-1)		W102-FU-3 (W1818-1)		W103-FU-3 (W1818-1)		W104-FU-3 (W1818-1)		W105-FU-3 (W1818-1)		W106-FU-3 (W1818-1)		W107-FU-3 (W1818-1)		W108-FU-3 (W1818-1)		W109-FU-3 (W1818-1)		W110-FU-3 (W1818-1)		W111-FU-3 (W1818-1)	
W101-FU-4 (W1818)		W102-FU-4 (W1818)		W103-FU-4 (W1818)		W104-FU-4 (W1818)		W105-FU-4 (W1818)		W106-FU-4 (W1818)		W107-FU-4 (W1818)		W108-FU-4 (W1818)		W109-FU-4 (W1818)		W110-FU-4 (W1818)		W111-FU-4 (W1818)	
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W201-FU-2 (W1818-1)		W202-FU-2 (W1818-1)		W203-FU-2 (W1818-1)		W204-FU-2 (W1818-1)		W205-FU-2 (W1818-1)		W206-FU-2 (W1818-1)		W207-FU-2 (W1818-1)		W208-FU-2 (W1818-1)		W209-FU-2 (W1818-1)		W210-FU-2 (W1818-1)		W211-FU-2 (W1818-1)	
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W201-FU-5 (W1818-1)		W202-FU-5 (W1818-1)		W203-FU-5 (W1818F)		W204-FU-5 (W1818-1)		W205-FU-5 (W1818-1)		W206-FU-5 (W1818-1)		W207-FU-5 (W1818-1)		W208-FU-5 (W1818-1)		W209-FU-5 (W1818F)		W210-FU-5 (W1818-1)		W211-FU-5 (W1818-1)	
18t	18t	18t		18t		18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	18t	

WEST SIDE
EAST SIDE



WELDING MAP MARKING SYSTEM

WELDING MAP INITIAL: W 1 01 - FU - 1
 SERIAL NUMBER: 1
 STEEL DECK DIRECTION: 1: WEST SIDE, 2: EAST SIDE
 ITEM CODE: DECK PLATE: FU, LOWER FLANGE: FL, INCLINED WEB: IW, EDGE FLANGE: EF
 SEGMENT NUMBER: 01

WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 F
 FIELD STAGE: 18
 PLATE JOINT THICKNESS (11): 18
 PLATE JOINT THICKNESS (12): F

FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

Refer To comments
on DRW. # SD-E-101.

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~103

FOR APPROVAL
 2016.02.25
 HYUNDAI E&SI
 YOULCHON

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
 MINISTRY OF PUBLIC WORKS
 ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
 CAUSEWAY PROJECT (MAIN LINK)
 CONTRACT RA/140**

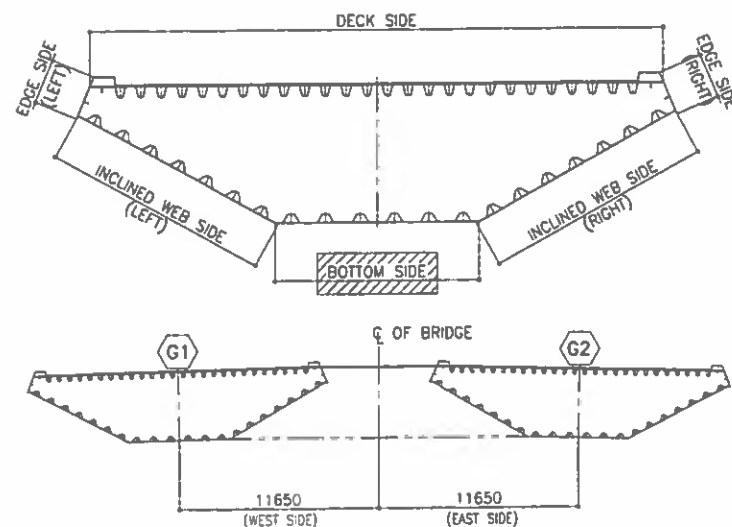
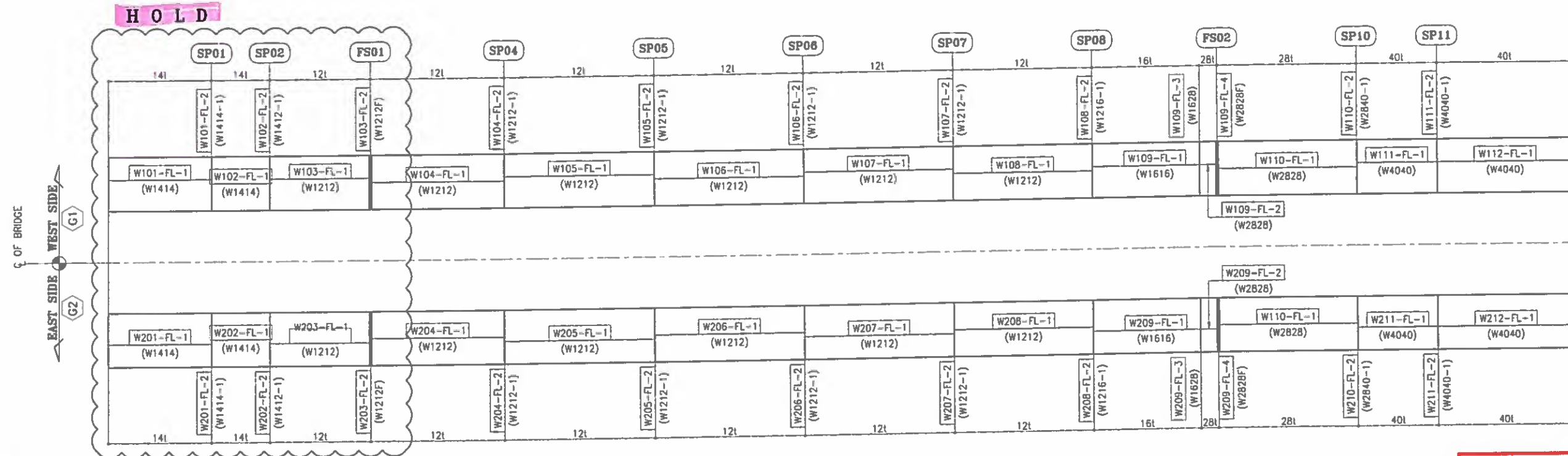
DRAWING TITLE
**MAIN BRIDGE
 STEEL DECK
 WELDING MAP (1)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

DATE ISSUED: 2016.02.25
 DATE: 2016.02.25
 CONTRACTOR: **HYUNDAI E&SI**
YOULCHON

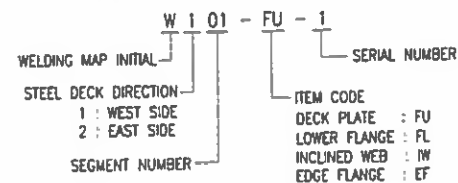
DRAWING NO.: **RA140-22-BRG-SD-WD-001**

WELDING MAP (BOTTOM SIDE)

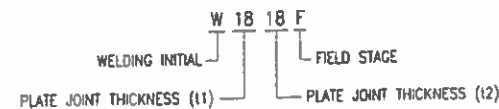


TYPICAL SECTION

WELDING MAP MARKING SYSTEM



WELDING JOINT MARKING SYSTEM



REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~103



REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
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EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
WELDING MAP (2)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

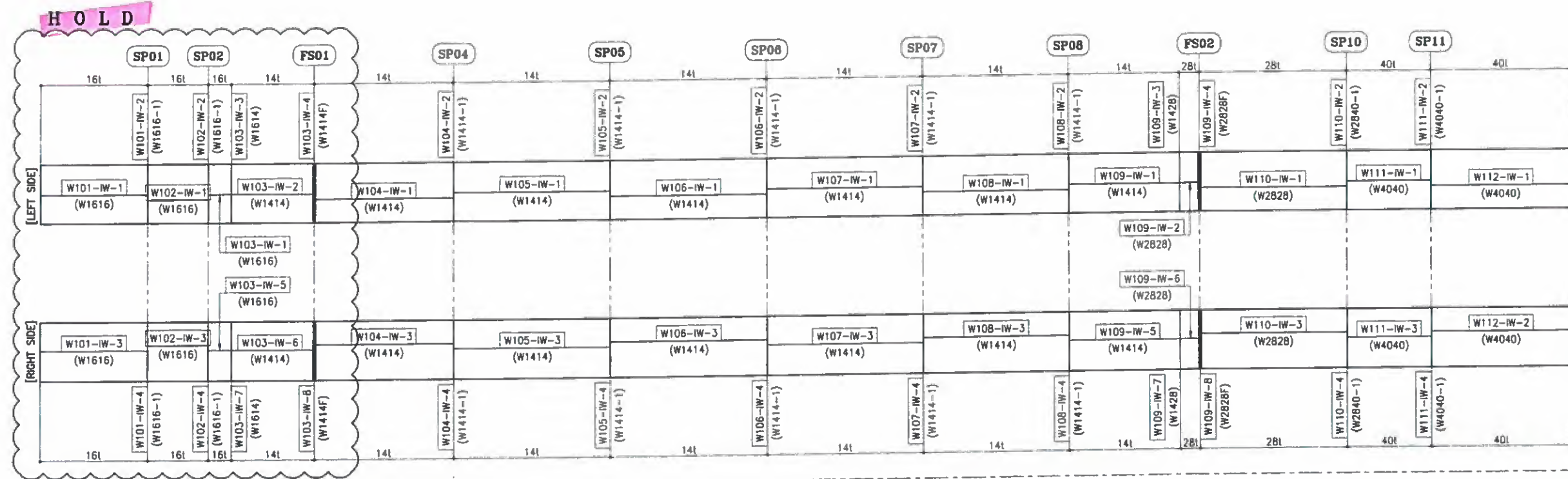
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-WD-002

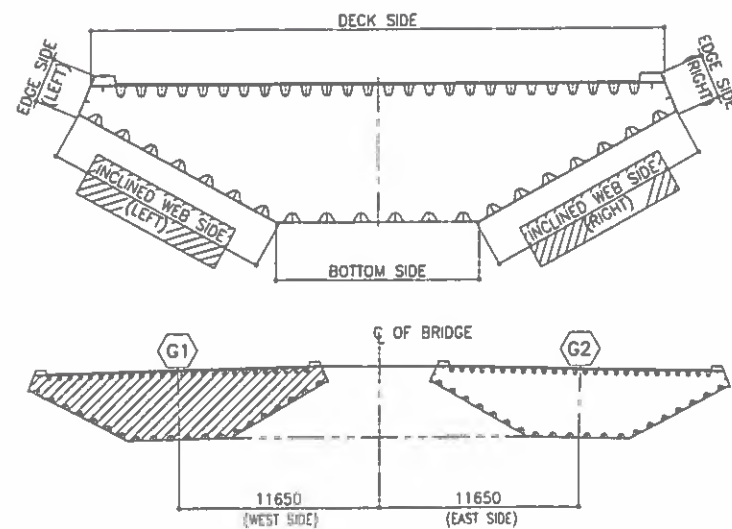
REV.
A

Refer To comments
on DWG. # SD-E401.

WELDING MAP (INCLINED WEB SIDE - WEST SIDE)



LINE OF BRIDGE
EAST SIDE
WEST SIDE



TYPICAL SECTION

WELDING MAP MARKING SYSTEM

WELDING MAP INITIAL: W 1 01 - FU - 1
SERIAL NUMBER: 1
STEEL DECK DIRECTION: 1: WEST SIDE, 2: EAST SIDE
SEGMENT NUMBER: 01
ITEM CODE: DECK PLATE: FU, LOWER FLANGE: FL, INCLINED WEB: IW, EDGE FLANGE: EF

WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 F
FIELD STAGE: 18
PLATE JOINT THICKNESS (I1): 18
PLATE JOINT THICKNESS (I2): F

Refer To comments
on DWG. # SD-E-101.

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~103

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.PARK	S.S. SONG	S.M. KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

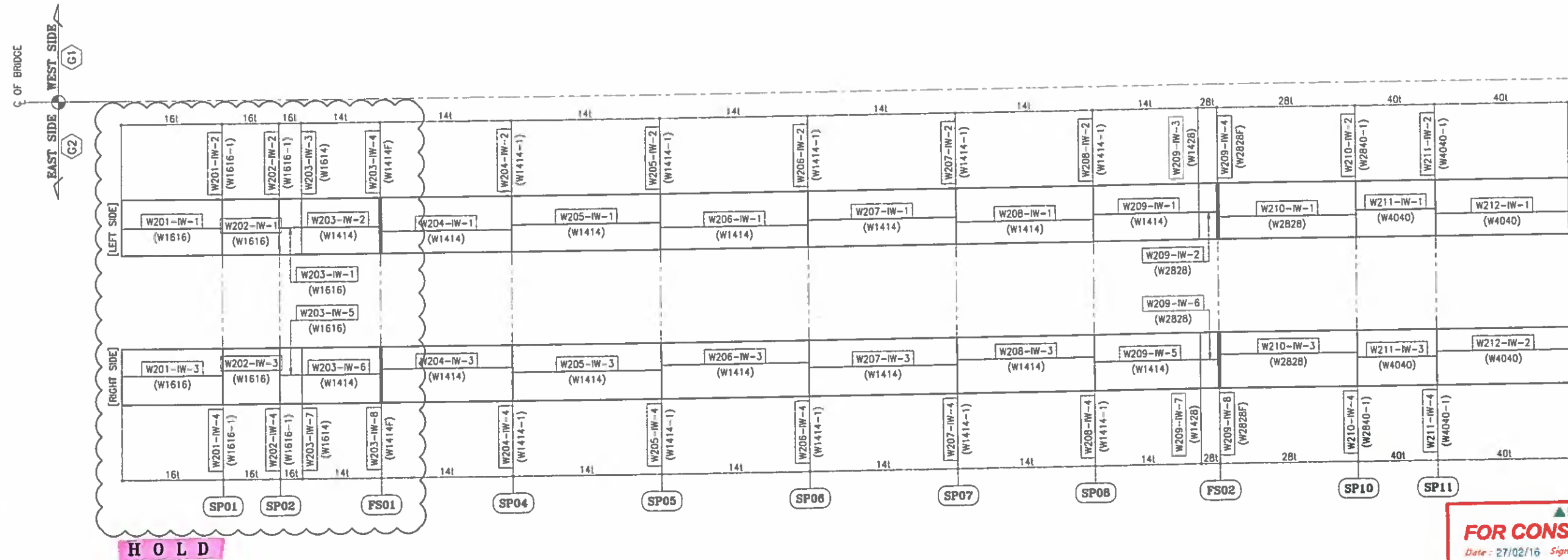
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
WELDING MAP (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.PARK	K.W. CHOI	S.S. SONG	S.M. KHON

DATE ISSUED: 2016.02.25
CONTRACTOR: HYUNDAI E&S CONSTRUCTION

DRAWING NO. RA140-22-BRG-SD-WD-003

WELDING MAP (INCLINED WEB SIDE - EAST SIDE)



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

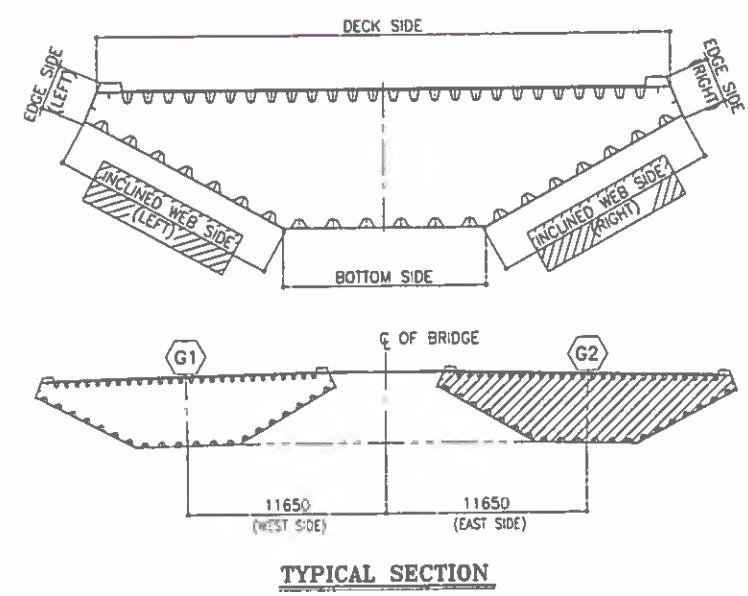
EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
WELDING MAP (4)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
**HYUNDAI E&S
ENGINEERING & CONSTRUCTION**
Drawing No. **RA140-22-BRG-SD-WD-004**



WELDING MAP MARKING SYSTEM

WELDING MAP INITIAL: W 1 01 - FU - 1
STEEL DECK DIRECTION:
1 : WEST SIDE
2 : EAST SIDE
SEGMENT NUMBER:
ITEM CODE:
DECK PLATE : FU
LOWER FLANGE : FL
INCLINED WEB : IW
EDGE FLANGE : EF

WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 F
PLATE JOINT THICKNESS (t1)
FIELD STAGE
PLATE JOINT THICKNESS (t2)

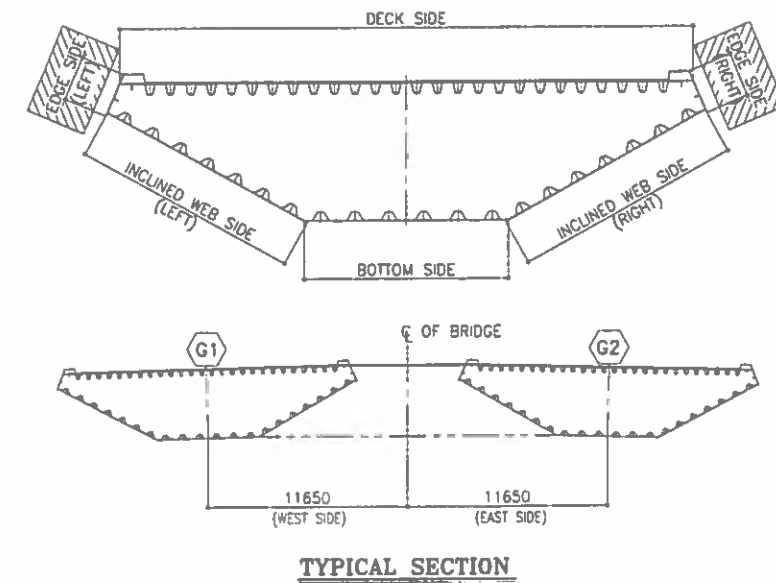
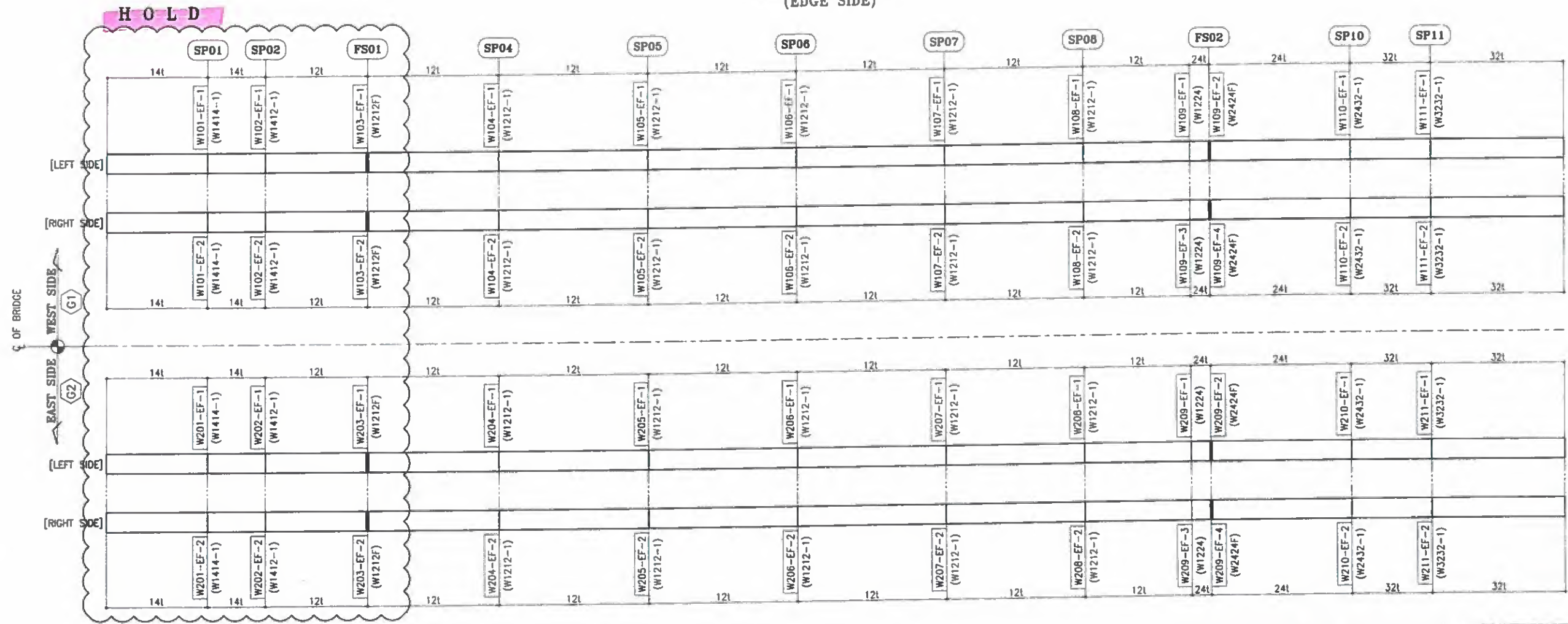
Refer to comment
on Drw. # SD-E-101.

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~103

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

REV. **A** **B**

WELDING MAP (EDGE SIDE)



WELDING MAP MARKING SYSTEM

WELDING MAP INITIAL: W 1 01 - FU - 1
 SERIAL NUMBER: 1
 STEEL DECK DIRECTION: 1: WEST SIDE, 2: EAST SIDE
 ITEM CODE: DECK PLATE: FU, LOWER FLANGE: FL, INCLINED WEB: IW, EDGE FLANGE: EF
 SEGMENT NUMBER: 01

WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 F
 FIELD STAGE: 18
 PLATE JOINT THICKNESS (11): 18
 PLATE JOINT THICKNESS (12): F

FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

Refer To comments
 on DWG. # SD-E-101.

REF. DRAWING	MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~103	

FOR APPROVAL
 2016.02.25
 HYUNDAI E&SI
 YOULCHON

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I. PARK	S.S. SON	S.M. KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

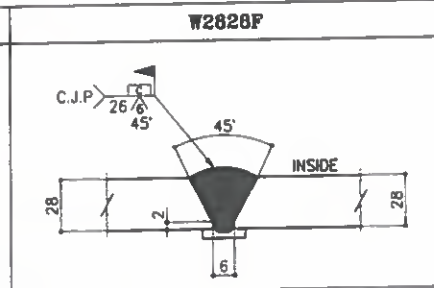
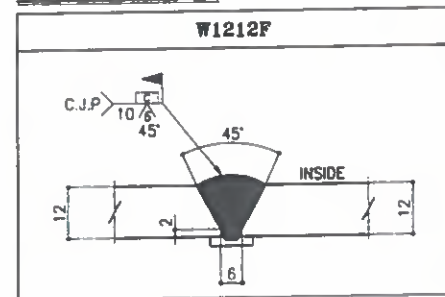
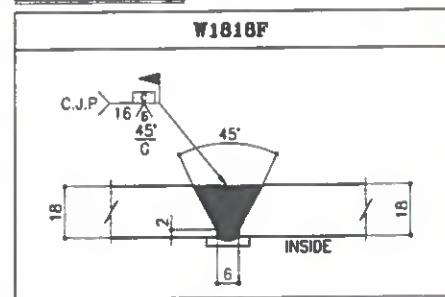
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
WELDING MAP (5)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION
Combined Group
 Contracting Company

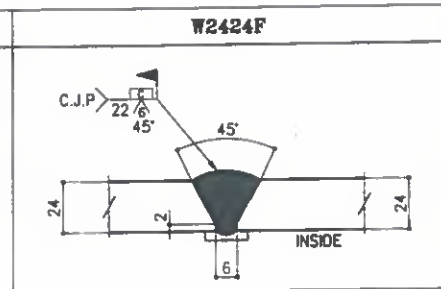
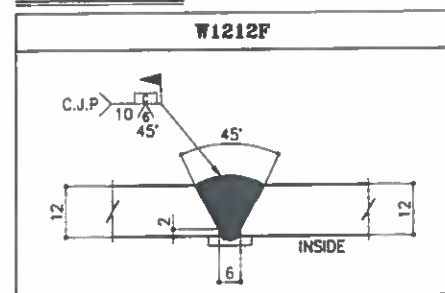
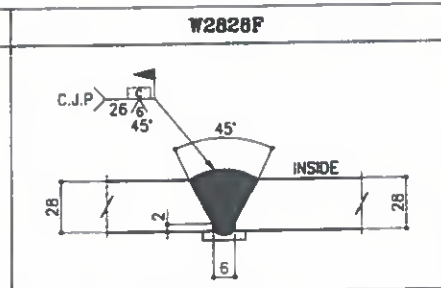
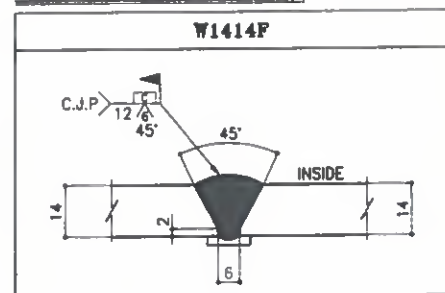
DRAWING NO.
RA140-22-BRG-SD-WD-005

REV.
 A



WELDING INITIAL — W 18 18 F — FIELD STAGE

PLATE JOINT THICKNESS (11) — — — PLATE JOINT THICKNESS (12)



Refer To comments on
Drawing Package No.
RA140-32-BRG-CW-DW-92120-A
2 RA140-32-BRG-CW-DW-92130-A

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPROV.
1	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONG	S.M.KHON

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK
WELDING DETAIL (1)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOH	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



HYUNDAI
ENGINEERING & CONSTRUCTION



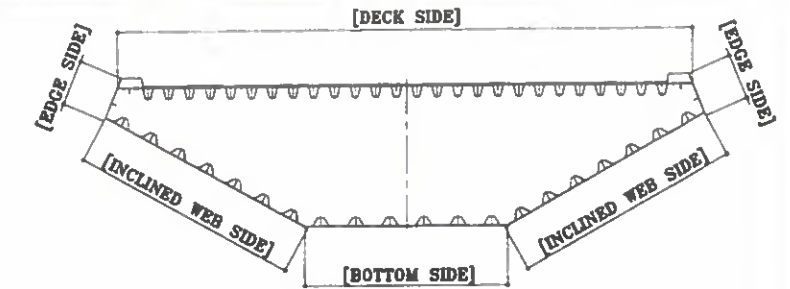
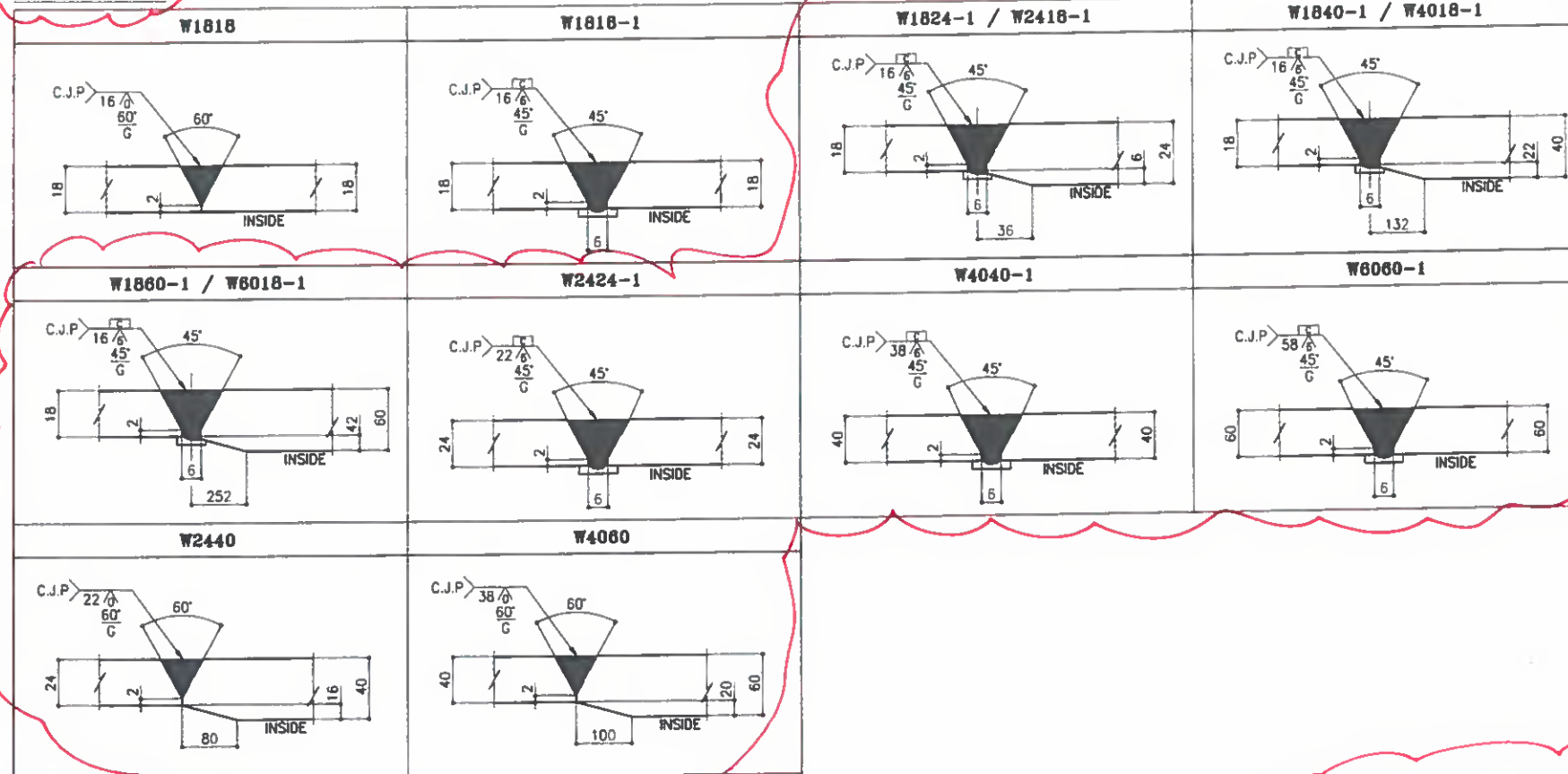
Combined Group
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-WD-101	A



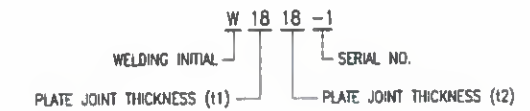
WELDING DETAIL [SHOP WELD]

[DECK SIDE]



KEY-PLAN

WELDING JOINT MARKING SYSTEM



← Provide Location of These welding details on The deck side welding map. Also This welding detail names not shown under same drawing for Part B, c and D. Contractor to update shopdrawing accordingly.

Refer To comments on
Drw. Package No.
RA140-32-BRG-CW-DW-92120-A1
2 RA140-32-BRG-CW-DW-92130-A1

Refer To comment
on Drw. # SD-E-101.

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

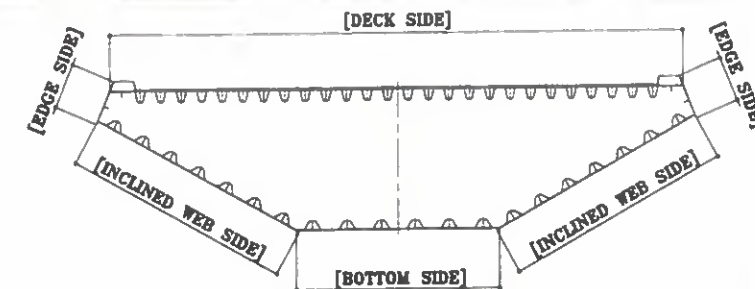
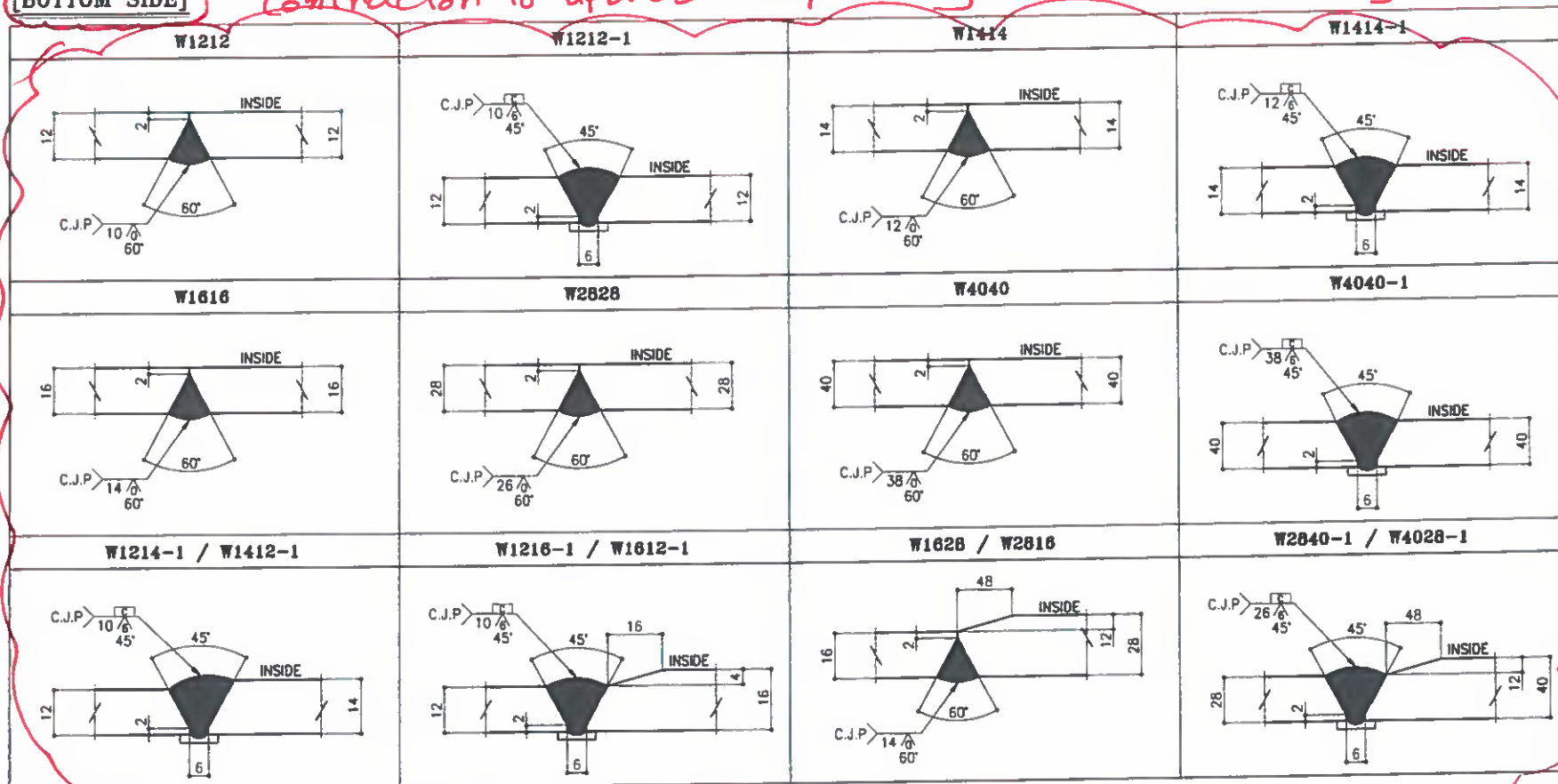
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I. PARK	S.S. SON	S.M. KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK WELDING DETAIL (2)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
NONE	H.I. PARK	K.W. CHON	S.S. SON	S.M. KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOULCHON					
DRAWING NO.					
RA140-22-BRG-SD-WD-102					
REV.					
A					

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

WELDING DETAIL [SHOP WELD]

The welding details shown under this drawing number for Part B, C and D dose not match the provided detail in this submission. Contractor to update shop drawing details accordingly.

[BOTTOM SIDE]



KEY-PLAN

WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 -1
SERIAL NO.: 1
PLATE JOINT THICKNESS (11): 11
PLATE JOINT THICKNESS (12): 12

① use approved welding detail as per detailed design drawing



② welding of plates with difference in Thickness should follow 1:6 slope



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

Refer To comments on Drw.
Package No.
RA140-32-BRG-CW-DW-92120-A1
& RA140-32-BRG-CW-DW-92130-A1

Refer To comment
on Drw. # SD-E-101.

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

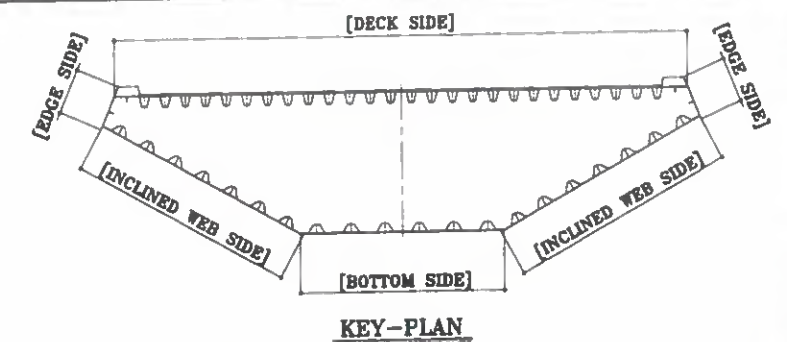
A 2016.02.25		FOR APPROVAL		H.I.PARK		S.S.SON		S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION		DRAWN	CHEC.	APPRO.			
EMPLOYER									
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION									
PROJECT TITLE									
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140									
DRAWING TITLE									
MAIN BRIDGE STEEL DECK WELDING DETAIL (3)									
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED					
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON					
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25					
CONTRACTOR									
HYUNDAI E&S YOULCHON									
DRAWING NO.									
RA140-22-BRG-SD-WD-103									
REV.									
A									

WELDING DETAIL
[SHOP WELD]

Refer To comment on Dnw.
SD-WD-103

[INCLINED WEB SIDE]

W1414	W1414-1 *	W1616	W1616-1 *
W2828	W4040	W4040-1 *	W1416 / W1614
W1428 / W2814	W2840-1 / W4028-1 *		



WELDING JOINT MARKING SYSTEM

WELDING INITIAL: W 18 18 -1
SERIAL NO.:
PLATE JOINT THICKNESS (11) PLATE JOINT THICKNESS (12)

* Use approved welding detail
as per detailed drawing



Refer To comments on Dnw.
Package No.
RA140-32-BRG-CW-DW-92120-A1
& RA140-32-BRG-CW-DW-92130-A1

Refer To comments
on Dnw. # SD-E-101.

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
WELDING DETAIL (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHOI	S.S.SON	S.M.KHON

DATE ISSUED: 2016.02.25
DATE: 2016.02.25 2016.02.25 2016.02.25 2016.02.25

CONTRACTOR
HYUNDAI **Combined Group**
Engineering & Construction Contracting Company

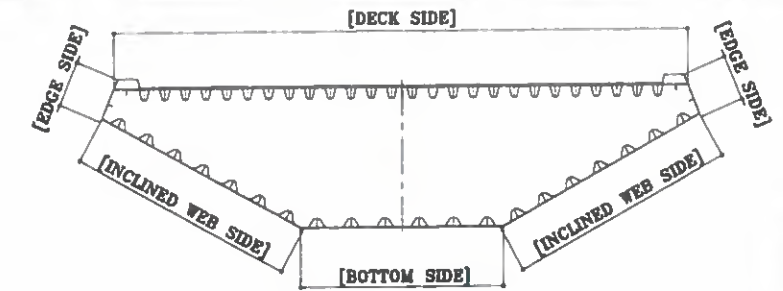
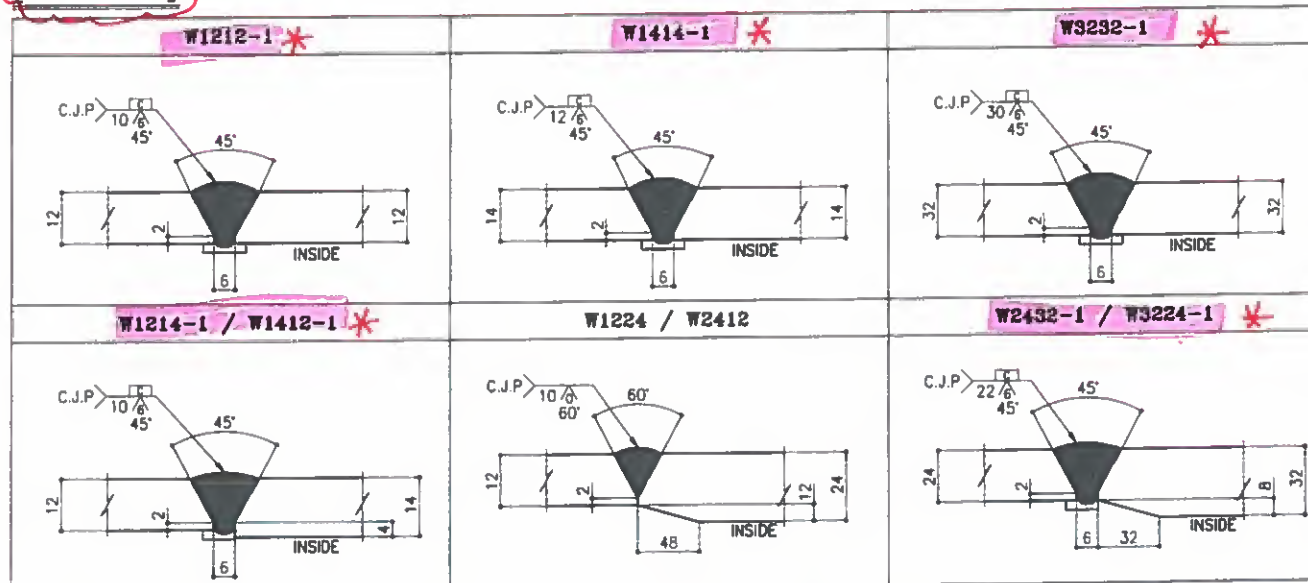
DRAWING NO.
RA140-22-BRG-SD-WD-104

REV
A

WELDING DETAIL [SHOP WELD]

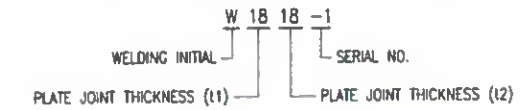
Refer To comments on Drw. SD-WD-103

[EDGE SIDE]

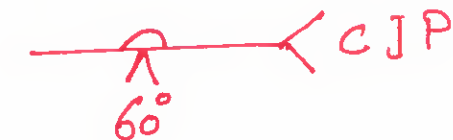


KEY-PLAN

WELDING JOINT MARKING SYSTEM



* use approved welding detail as per detailed drawing.



Refer to comments on Drw.
Package No.
RA140-32-BRG-CW-DW-92120-A1
RA140-32-BRG-CW-DW-92130-A1

Refer To comments on Drw. # SD-E-101

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK WELDING DETAIL (5)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOUNGCHON					
DRAWING NO.					
RA140-22-BRG-SD-WD-105					
REV.					
A					

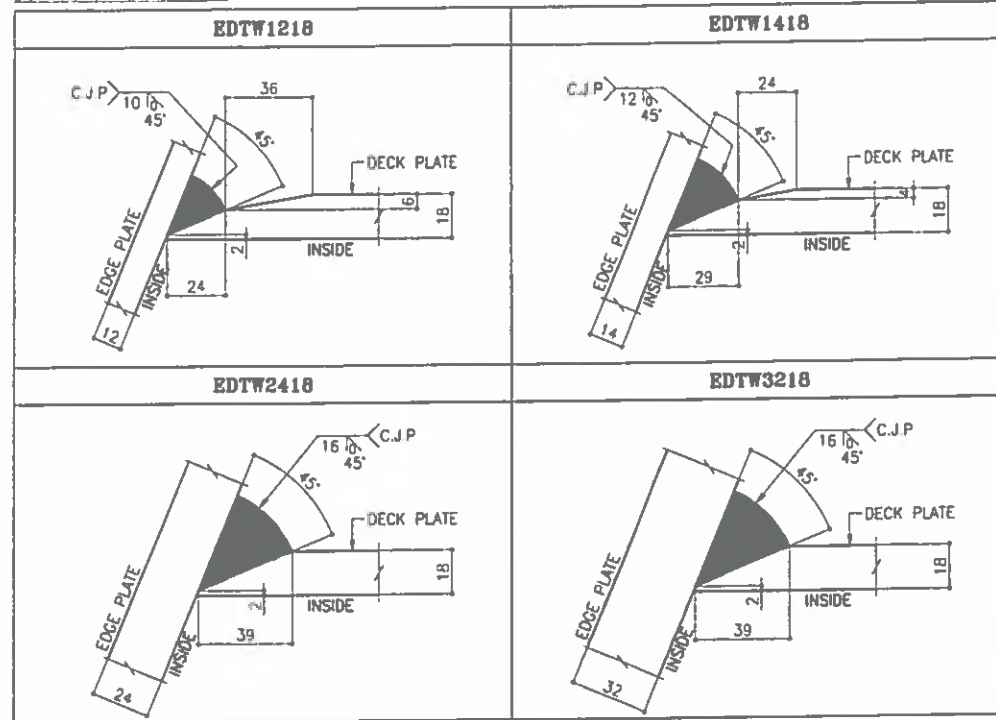
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOUNGCHON

HYUNDAI
ENGINEERING & CONSTRUCTION

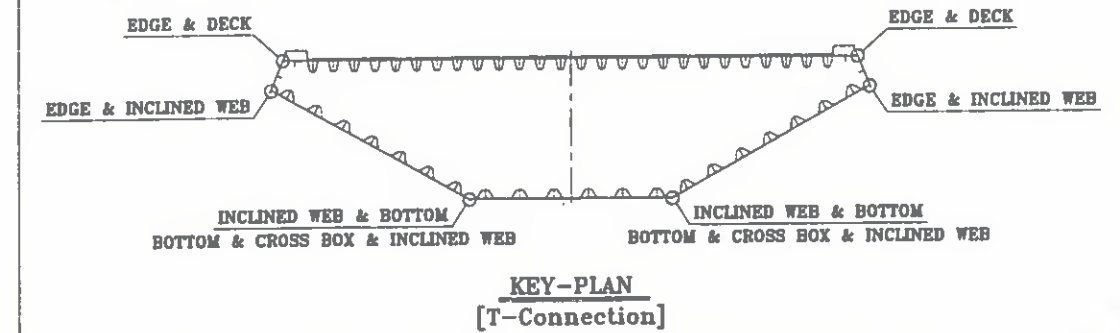
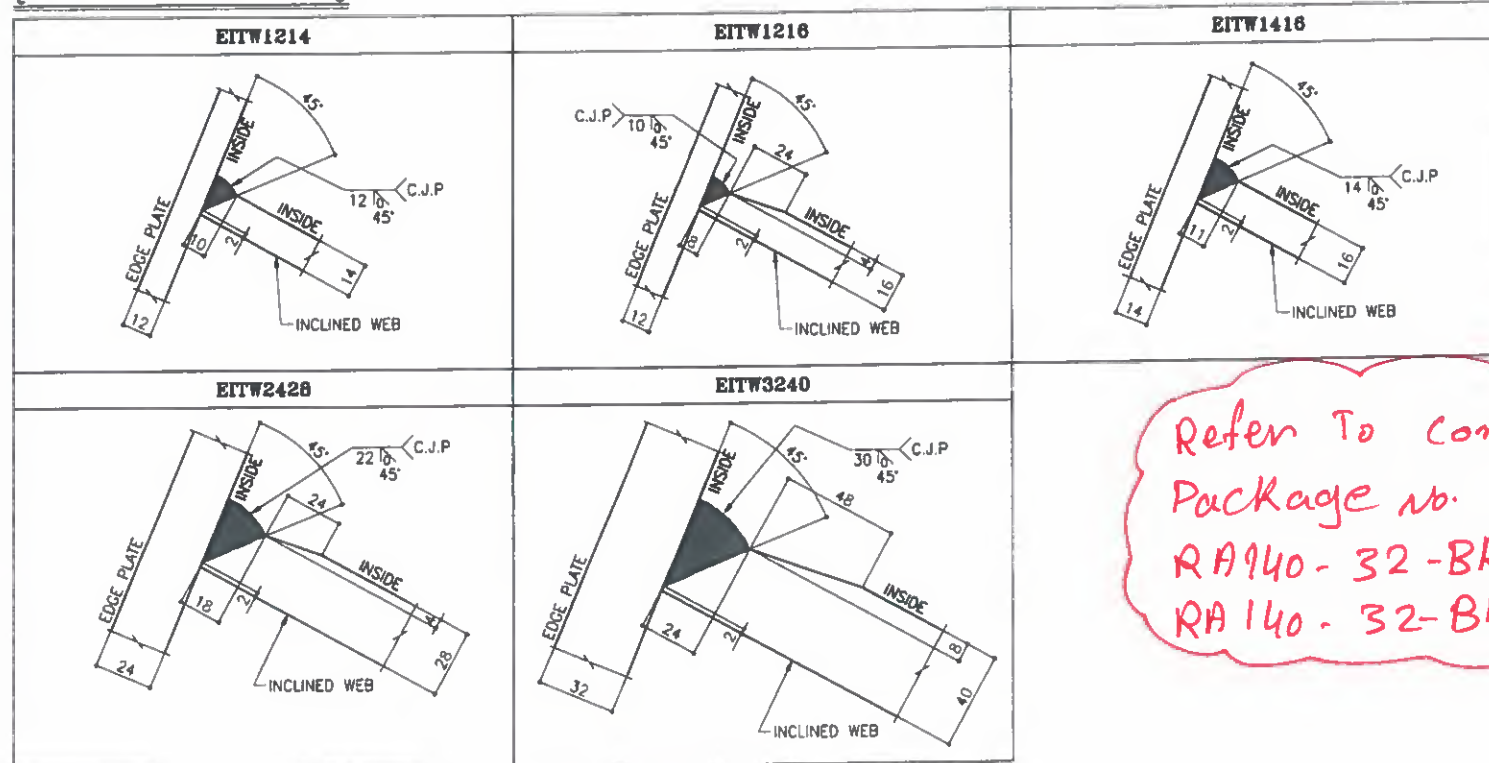
Combined Group
Consulting Company

WELDING DETAIL [SHOP WELD : T-Connection]

[EDGE & DECK]

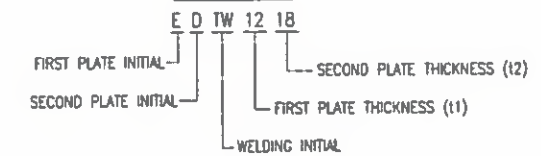


[EDGE & INCLINED WEB]

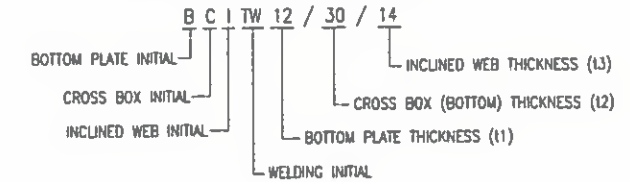


WELDING JOINT MARKING SYSTEM

GENERAL



CROSS BOX CONNECTION



REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
WELDING DETAIL (6)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

DATE ISSUED
2016.02.25

CONTRACTOR
HYUNDAI E&S

DRAWING NO.
RA140-22-BRG-SD-WD-106

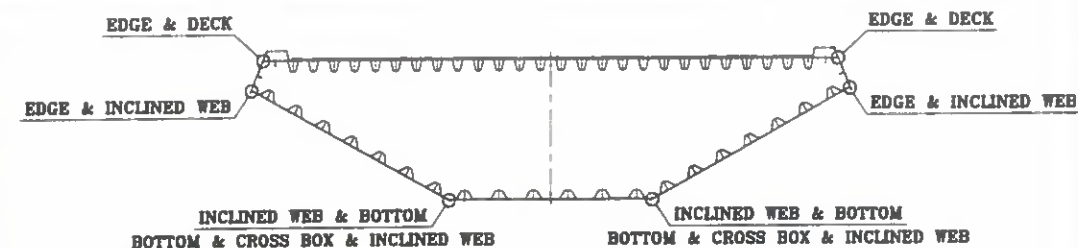
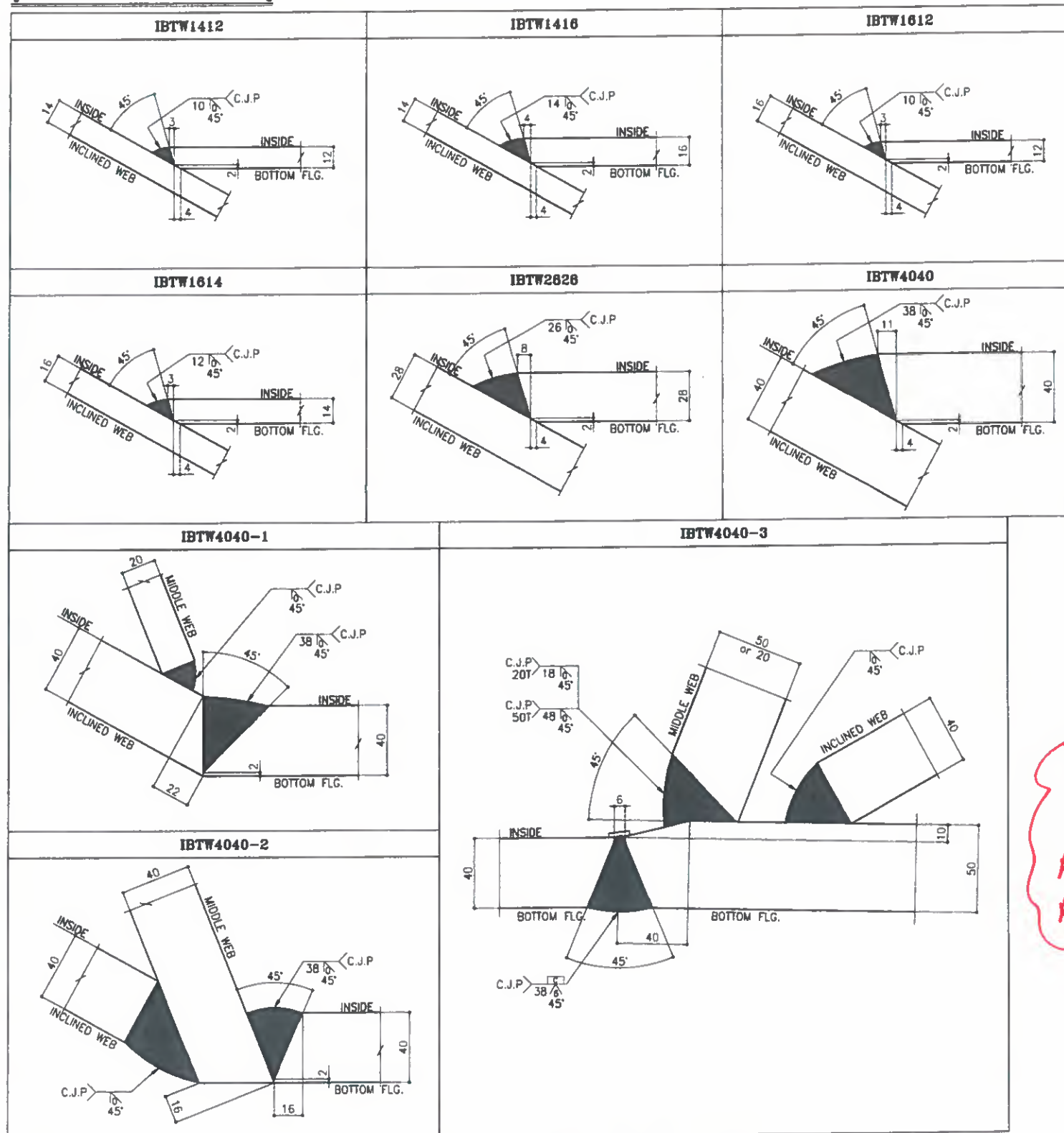
REV.
A

Refer To comments on DWG.
Package no.
RA140-32-BRG-CW-DW-92120-A1
RA140-32-BRG-CW-DW-92130-A1



WELDING DETAIL [SHOP WELD : T-Connection]

[INCLINED WEB & BOTTOM]



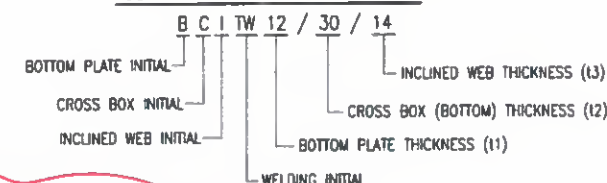
KEY-PLAN [T-Connection]

WELDING JOINT MARKING SYSTEM

GENERAL



CROSS BOX CONNECTION



Provide reference for
using angle of welding

Refer To comments on Dwg.
Package No.
RA140-32-BRG-CW-DW-92120-A
RA140-32-BRG-CW-DW-92130-A

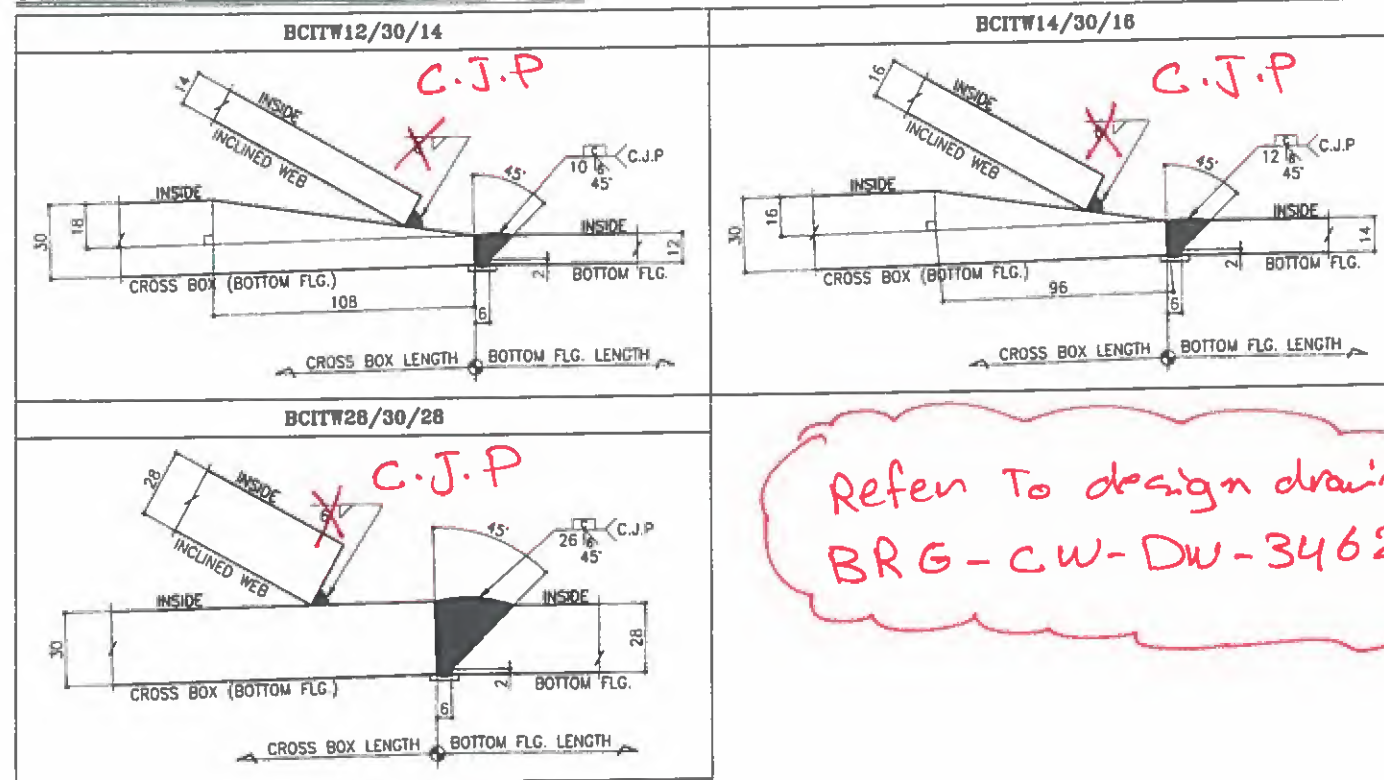
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

A		2016.02.25		FOR APPROVAL		H.I.PARK		S.S.SONH		S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION				DRAWN	CHECK	APPROD.			
EMPLOYER											
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION											
PROJECT TITLE											
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140											
DRAWING TITLE											
MAIN BRIDGE STEEL DECK WELDING DETAIL (7)											
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED							
NONE	H.I.PARK	K.W.CHOI	S.S.SONH	S.M.KHON							
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25							
CONTRACTOR											
HYUNDAI E&S YOULCHON											
DRAWING NO.											
RA140-22-BRG-SD-WD-107											
REV.											
A											

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

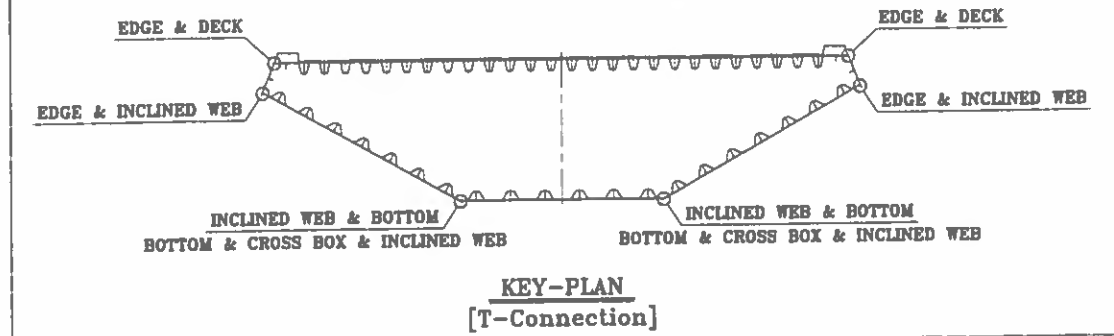
WELDING DETAIL [SHOP WELD : T-Connection]

[BOTTOM & CROSS BOX & INCLINED WEB]

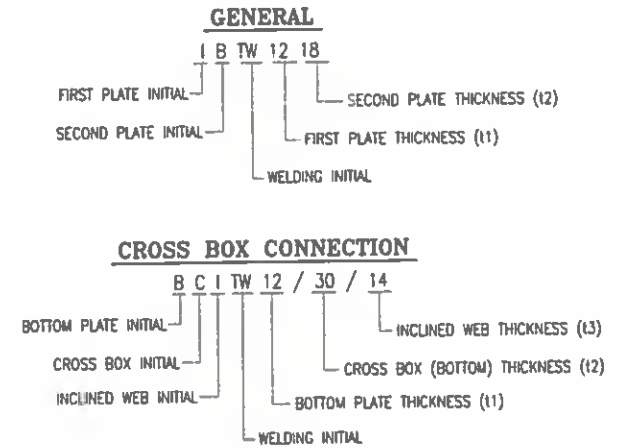


Refer To design drawing
BRG-CW-DW-34624-B1

Refer To comments on Dnw. Package No.
RA140-32-BRG-CW-DW-92120-A1
RA140-32-BRG-CW-DW-92130-A1



WELDING JOINT MARKING SYSTEM



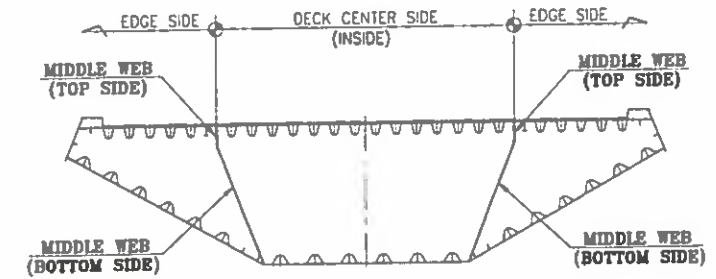
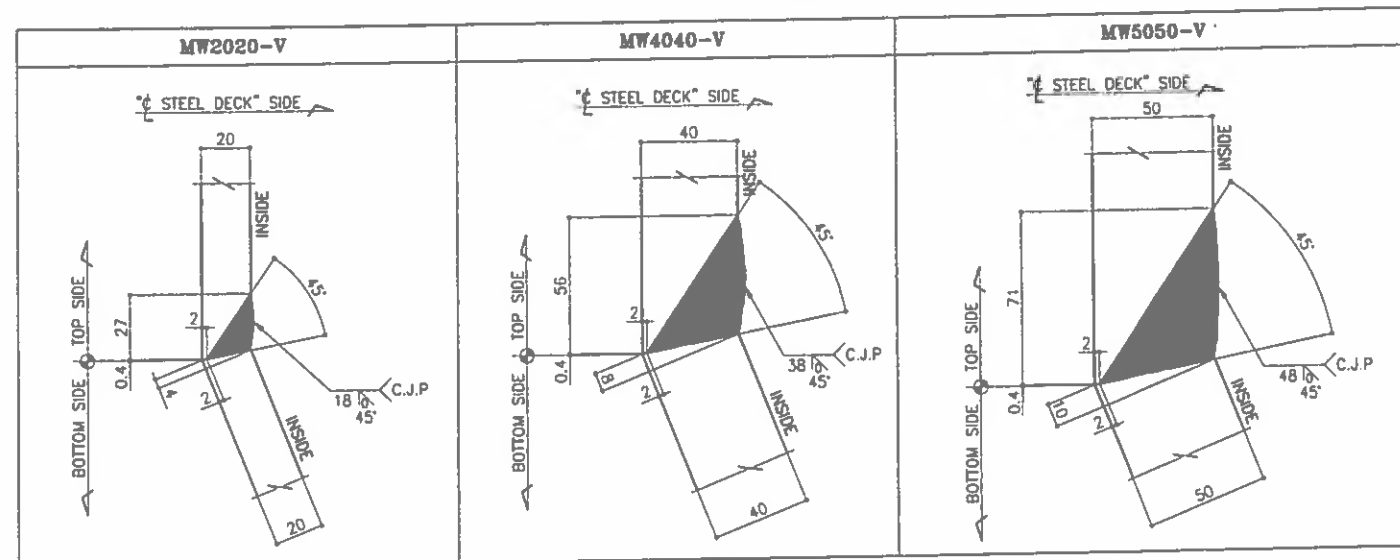
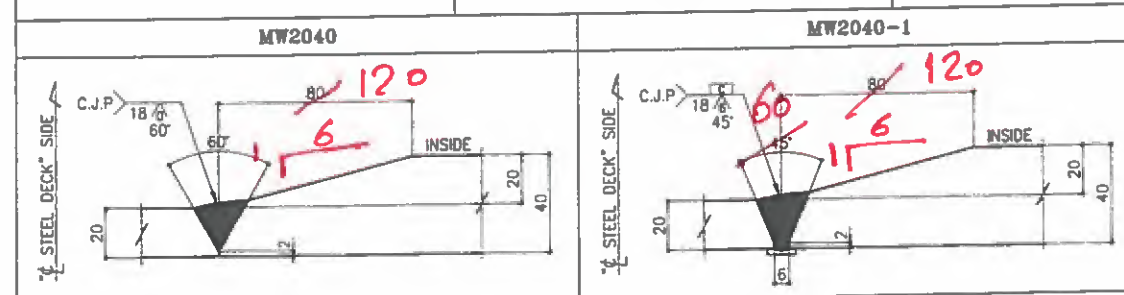
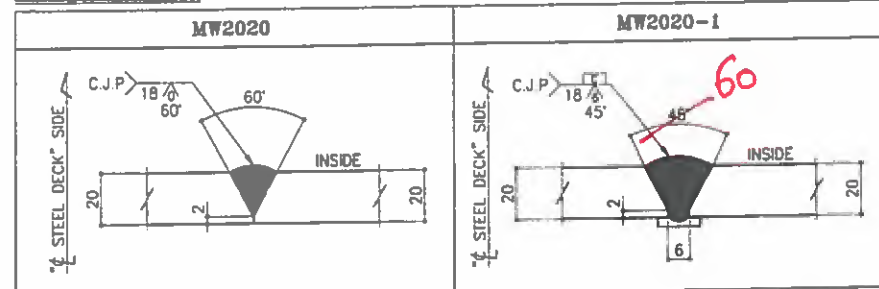
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

			</						

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

WELDING DETAIL [SHOP WELD]

[MIDDLE WEB]



KEY-PLAN

WELDING JOINT MARKING SYSTEM

MW 18 18 -1
MIDDLE WEB WELDING INITIAL SERIAL NO.
PLATE JOINT THICKNESS (t1) PLATE JOINT THICKNESS (t2)

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
WELDING DETAIL (6)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHON	S.S.SON	S.M.KHON

CONTRACTOR
**HYUNDAI E&S
Combined Group**

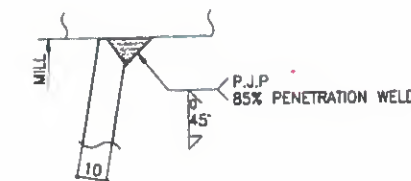
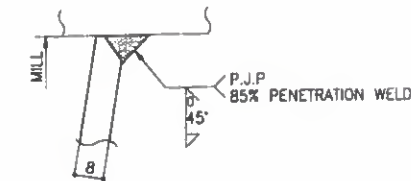
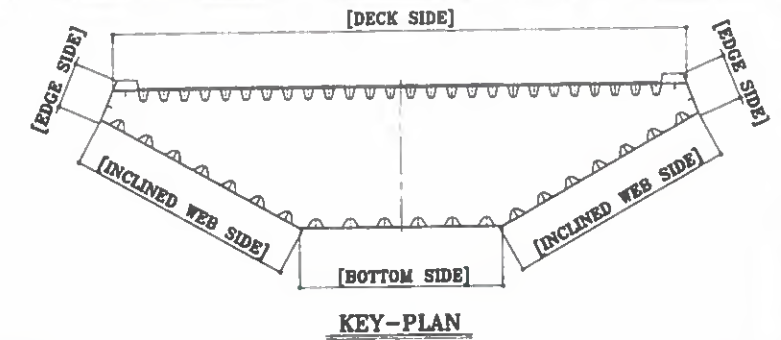
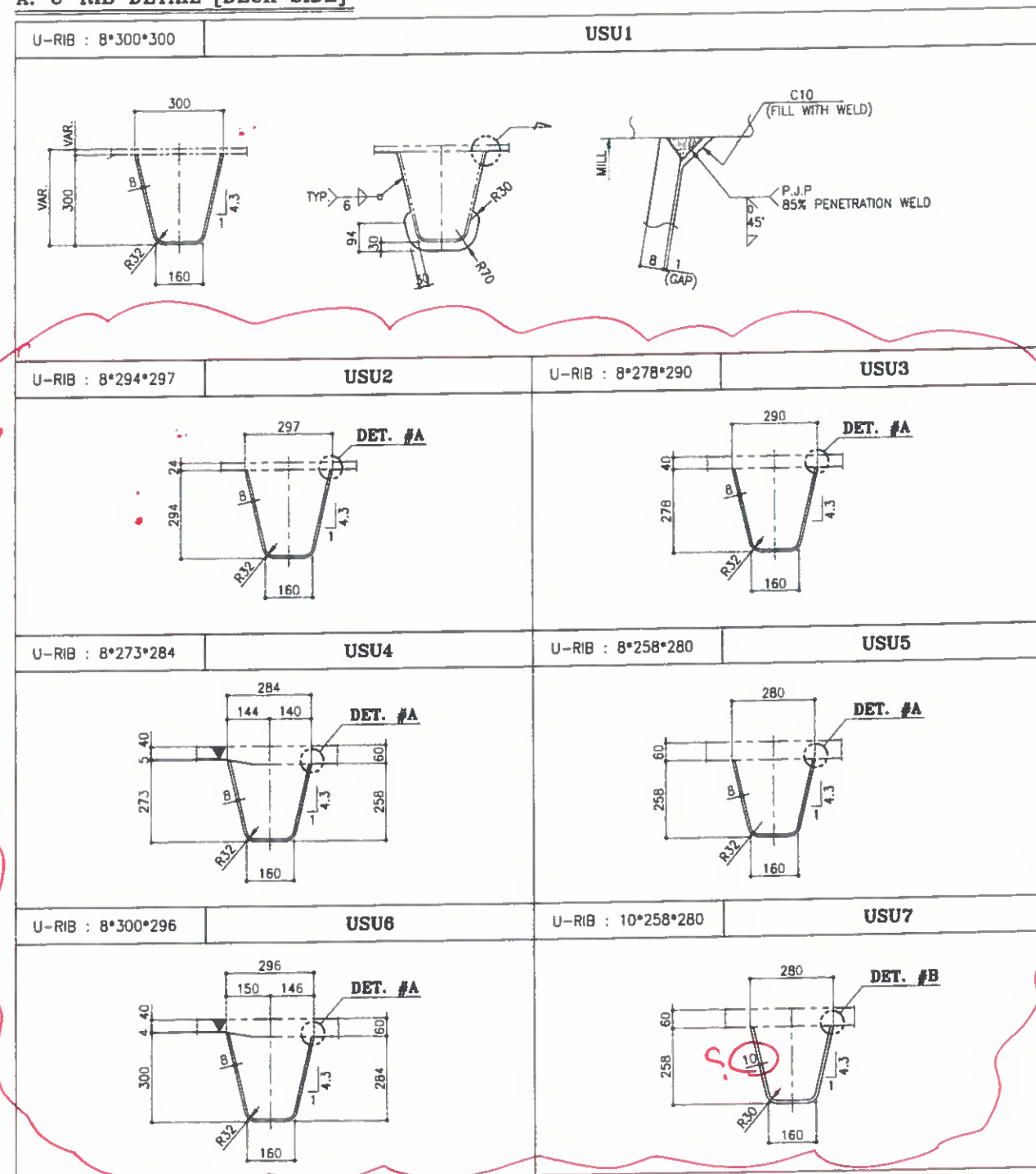
FOR APPROVAL
2016.02.25
**HYUNDAI E&S
YOULCHON**

DRAWING NO
RA140-22-BRG-SD-WD-109

REV.
A

U-RIB STANDARD DETAIL

A. U-RIB DETAIL [DECK SIDE]



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE S.O.B. UNLESS NOTED
 2. SCALLOP R= 25, O= 10 UNLESS NOTED
 3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I. PARK	S.S. SONG	S.M. KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
STANDARD DETAIL (1)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK	K.W. CHOI	S.S. SONG	S.M. KHON

CONTRACTOR
**HYUNDAI E&S
YOULCHON**

DRAWING NO.
RA140-22-BRG-SD-STD-001

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

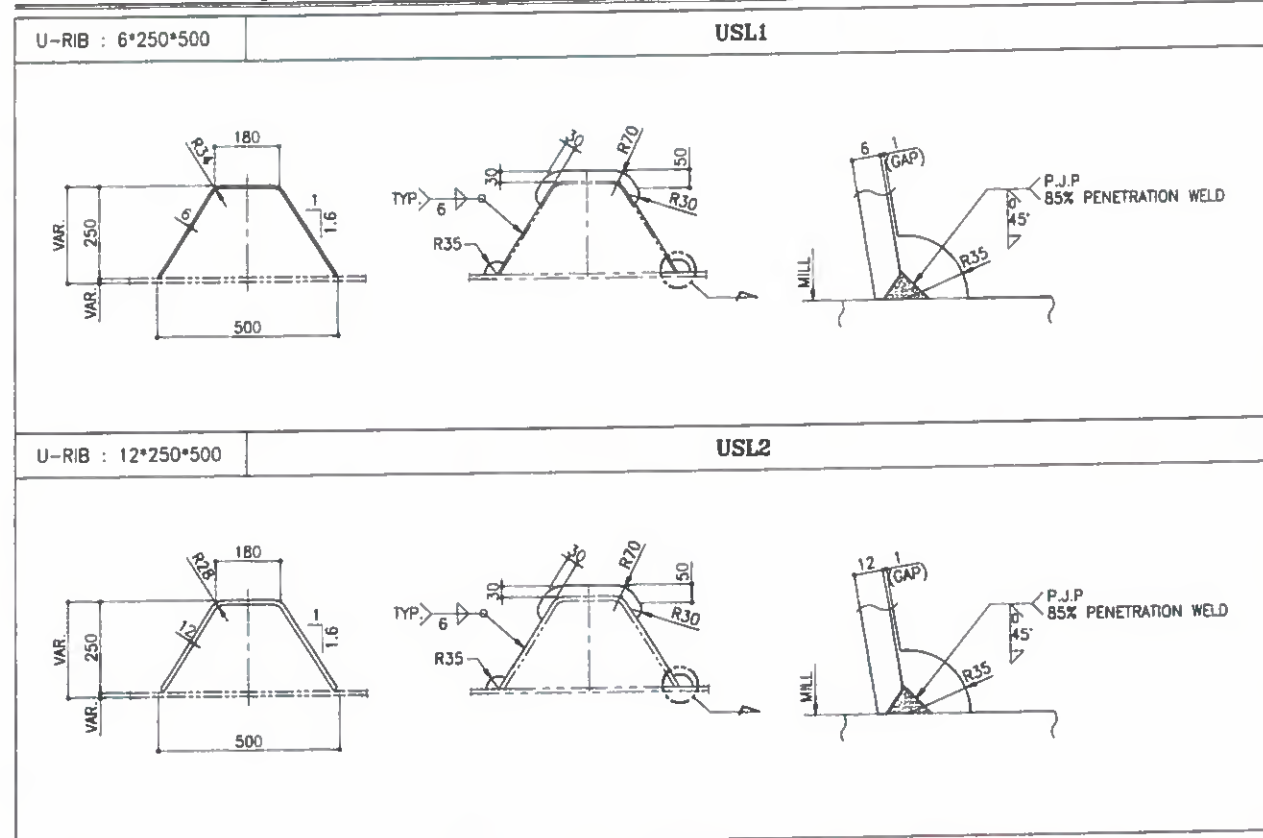
- 1- Provide reference for location of USU2 → USU7
- 2- Provide reference for 10mm thickness of U-RIB for USU7
- 3- All U-RIB depth should follow the dimension table of U-RIB as per design drawing CW-DW-34622-B1 and thickness should follow design drawing CW-DW-34421-B2

Refer To comments on Drw. Package RA140-32-BRG-CW-DW-92120-A1 & RA140-32-BRG-CW-DW-92130-A1

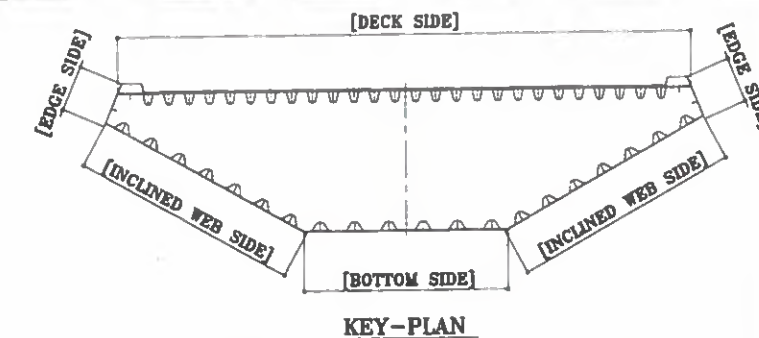
Refer to comments on Drw. # SD-E-101.

U-RIB STANDARD DETAIL

B. U-RIB DETAIL [BOTTOM SIDE] & [INCLINED WEB SIDE]



1- Provide reference for USL2 and U-RIB Thickness 12mm.
All U-RIB thickness should follow design drawing
CW-DW-34421-B2.



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, D= 10 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STANDARD DETAIL (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

DRAWING NO.	REV
RA140-22-BRG-SD-STD-002	A

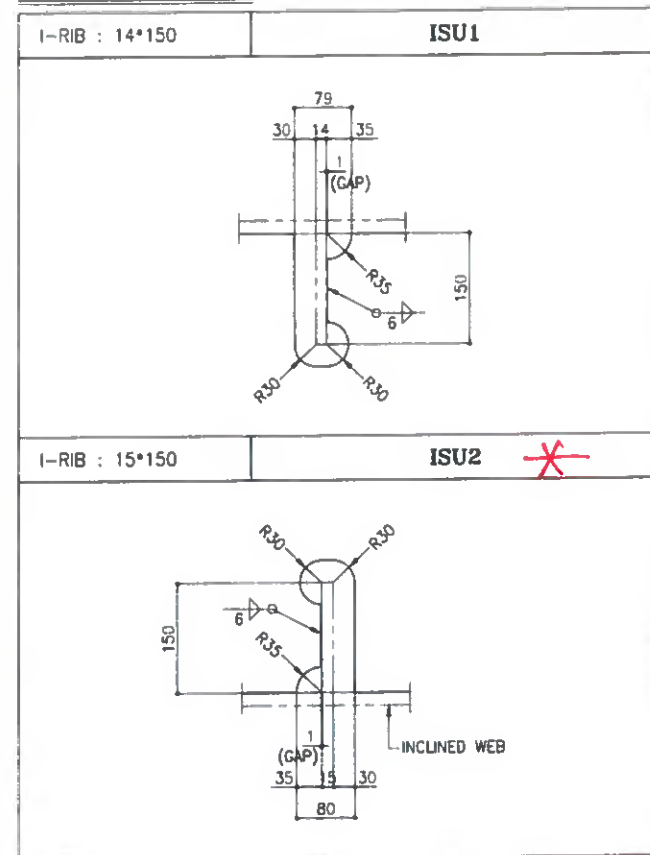
Refer To comments on Drw. Package 16.
RA140-32-BRG-CW-DW-92120-A1
& RA140-32-BRG-CW-DW-92130-A1

Refer To comments
on Drw. # SD-E-101

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

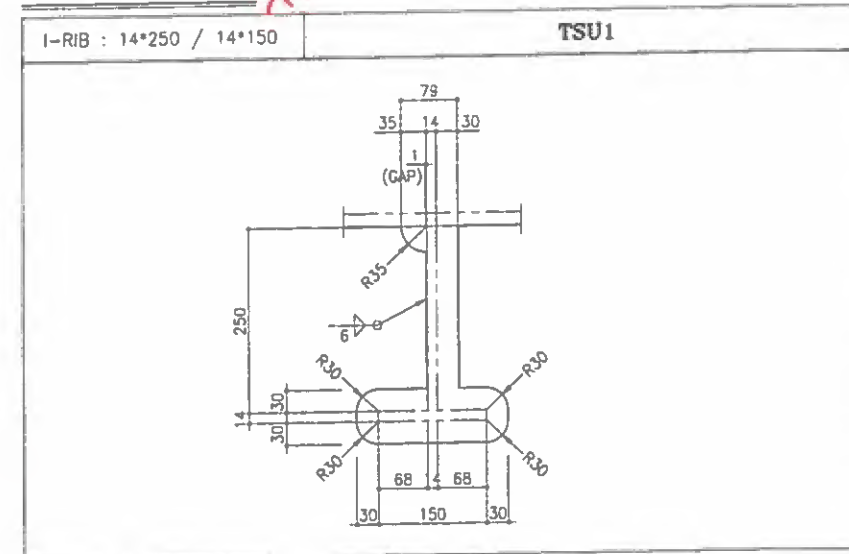
I-RIB STANDARD DETAIL

A. I-RIB DETAIL



T-RIB STANDARD DETAIL

A. T-RIB DETAIL *



* Provide reference.

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R: 35, 10 UNLESS NOTED
3. ALL FILLET WELD: 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STANDARD DETAIL (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI **Combined Group**

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-003

REV.
A

(Provide Approved Reference from The detailing design)

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

U-RIB : 8*300*300

USC01

"KUWAIT CITY" SIDE "SUBIYAH" SIDE
(PYLON)

DECK PLATE

A

C.J.P.

U-RIB (8t)

PL12-UDP101

PL8-CUS101

U-RIB (8t)

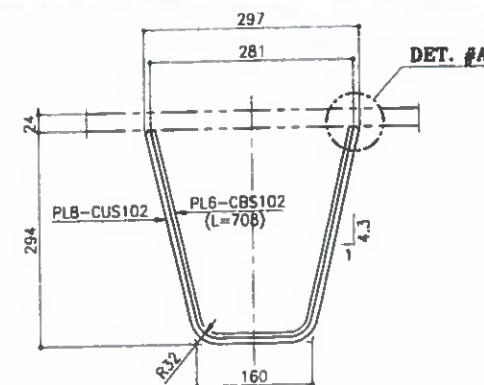
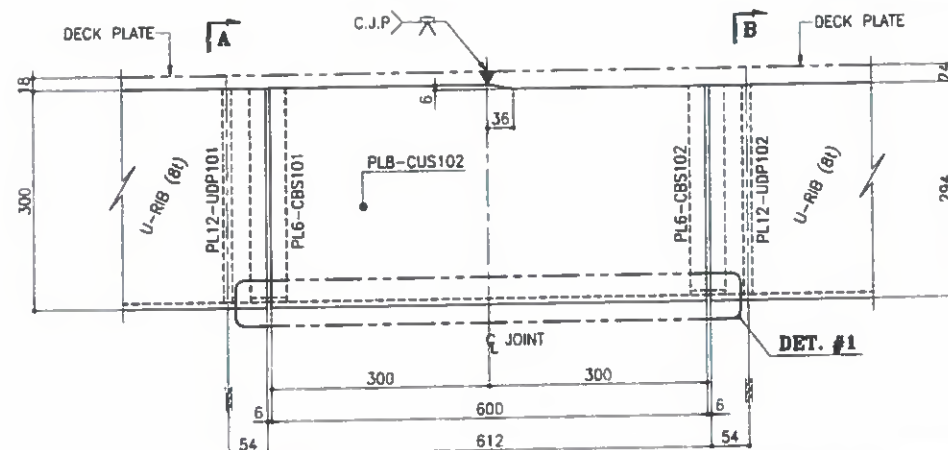
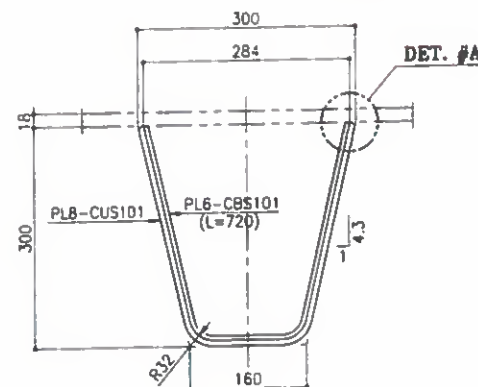
DECK PLATE

JOINT

DET. #1

300 300 600 612 54 54

300 300 600 612 54 54



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	01/06/25	FOR APPROVAL	HJ.PARK	S.S.SONG	S.MOHAMMAD		
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROD.		
EMPLOYER							

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



دولة الكويت
وزارة الأشغال العامة والإسكان

Refer To comments on Drw. Package No. 1
RA140-32-BRG-CW-DW-92120-1
RA140-32-BRG-CW-DW-92130-1

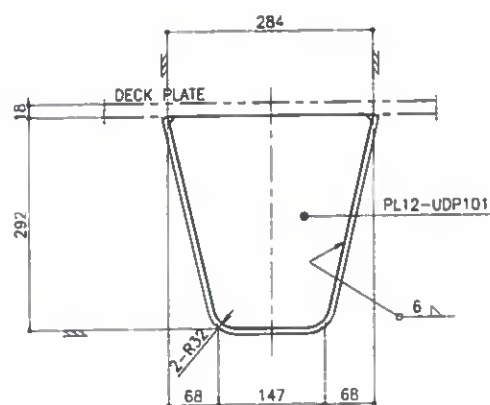
PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25
CONTRACTOR				

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

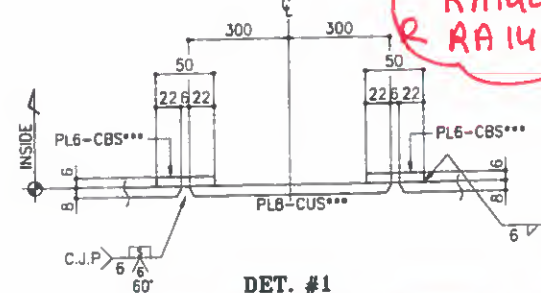
 		
DRAWING NO. RA140-22-BRG-SD-STD-101		REV. A

Refer To comments on
Drw. # SD-E-101.

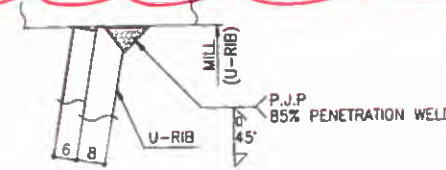


Technical drawing of a U-shaped component. The overall width is 281. The overall height is 286. The top flange has a thickness of 24. The bottom flange has a width of 67. The side walls are 147 wide at the bottom. The component is labeled "DECK PLATE" and "PL12-UDP102". A dimension of 6 is shown for the bottom flange thickness. A note "Z-R32" is present near the bottom corner.

SECT. B



DET. #1

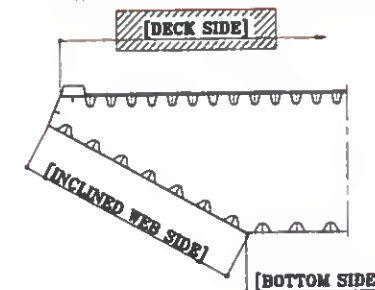


DET. #A

Refer To Comments on Draw. #
SD-STD-1012.001

BILL OF MATERIALS

HYUNDAI **COMBINED GROUP**
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.D. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2018.02.23	FOR APPROVAL	H. PARK	S. SONG	S. M. KIM
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-A (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



HYUNDA
ENGINEERING & CONSTRUCTION



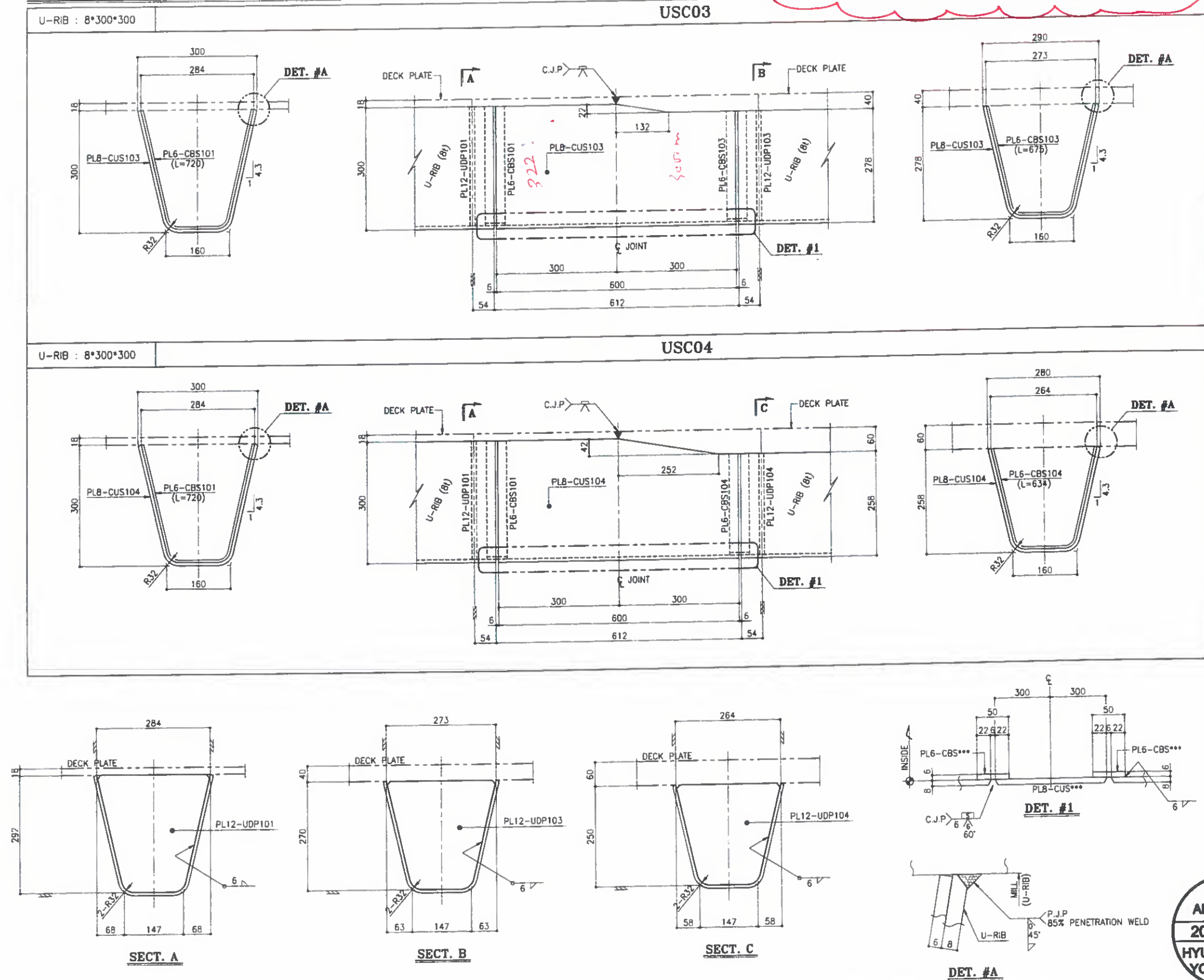
Combined Group
Contracting Company

DRAWING NO.

RA140-22-BRG-SD-STD-102

RE

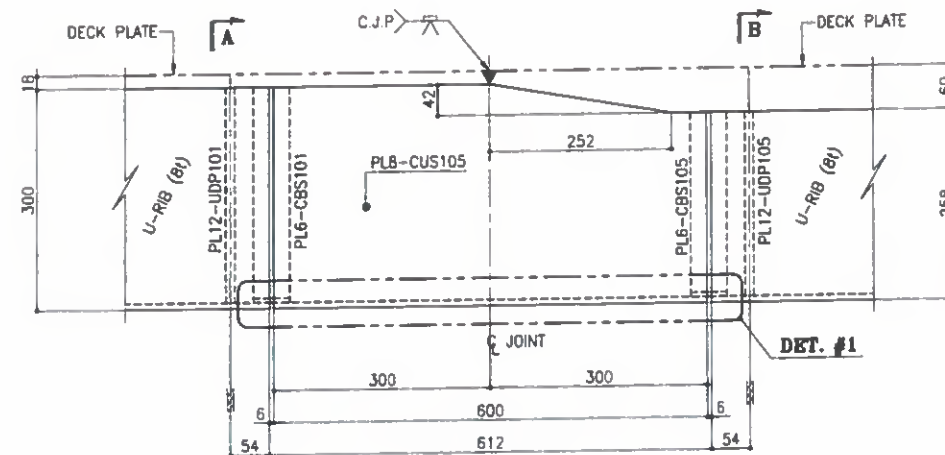
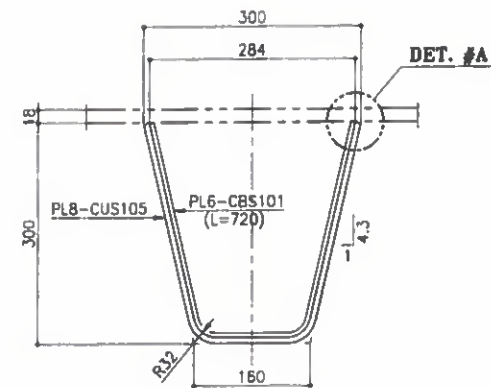
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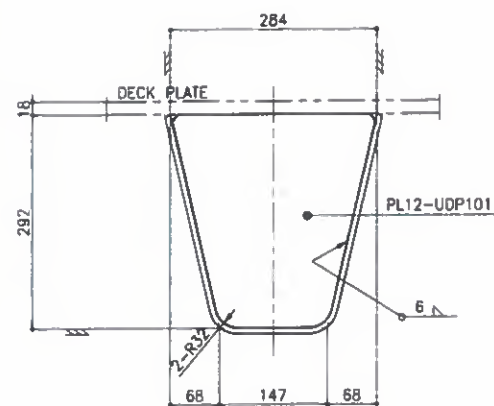
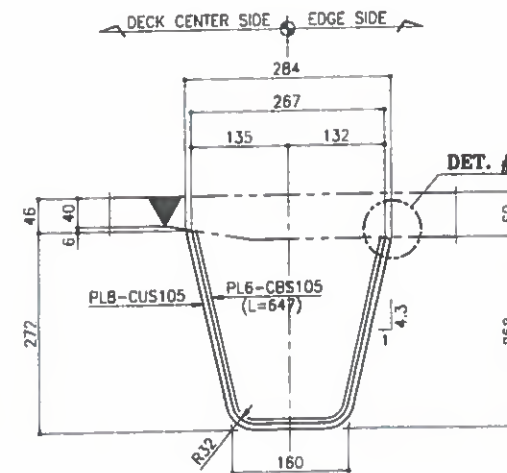
Refer To Comments on Dnw. #
SD-STD-1012001

U-RIB : 8*300*300

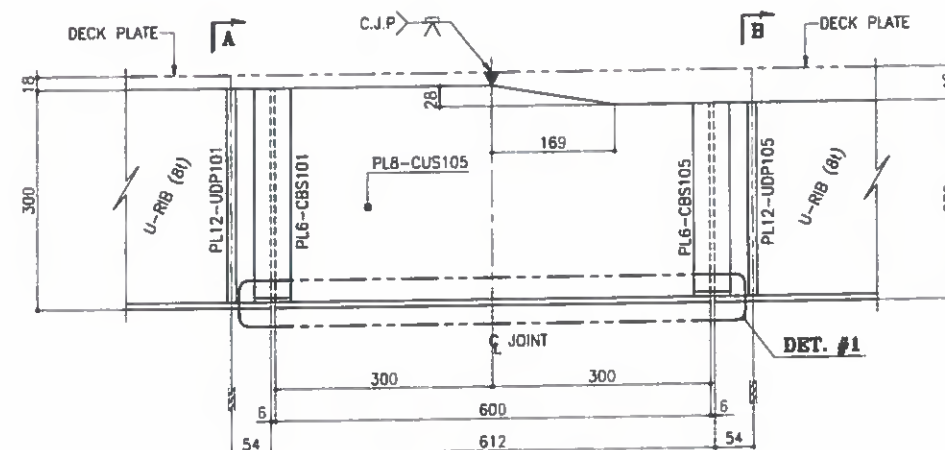
USC05



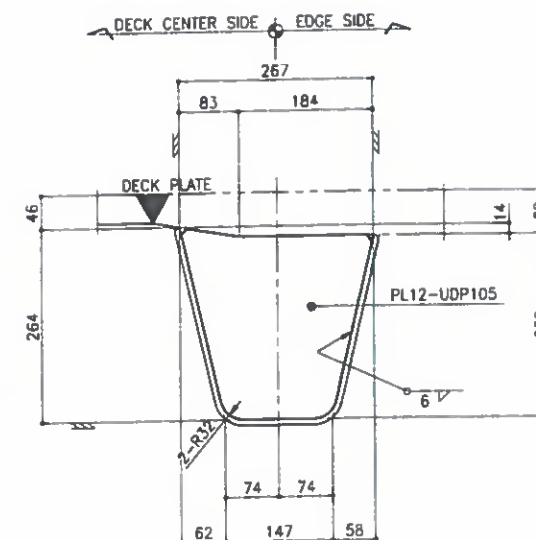
EDGE SIDE



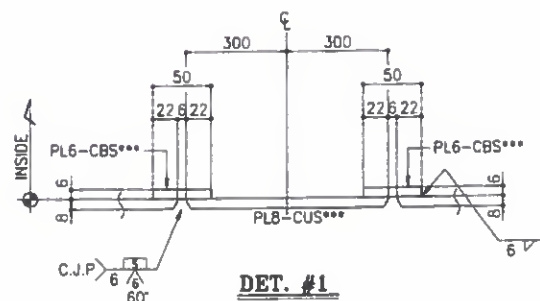
SECT. A



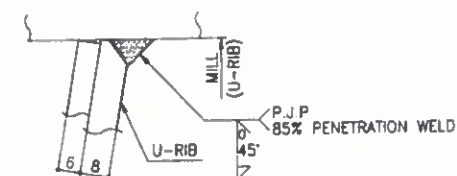
DECK CENTER SIDE



SECT. B

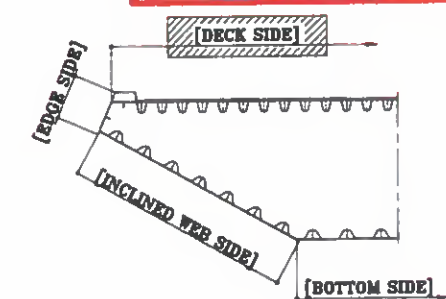


DET. #1



DET. #A

HYUNDAI CONCRETE GROUP
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*



KEY-PLAN

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2018.02.25	FOR APPROVAL	HJ PARK	S.S. CHOI	S. KIM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-A (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR




DRAWING NO.

RA140-22-BRG-SD-STD-103

EV.

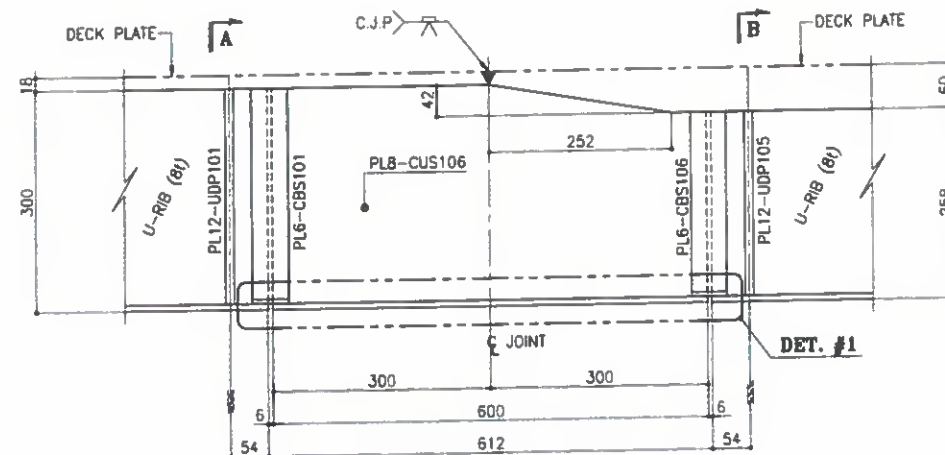
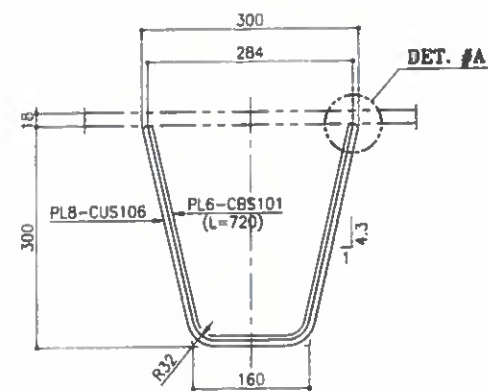
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To Comments on Draw.#
SD - STD- 101 & 001.

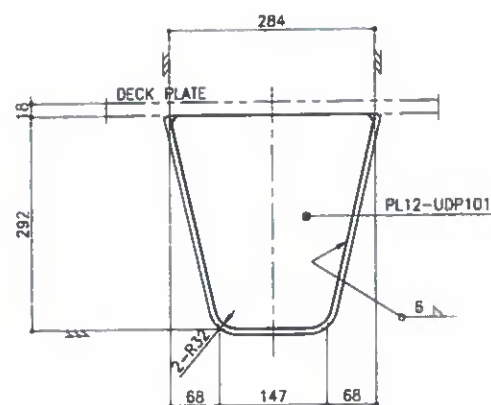
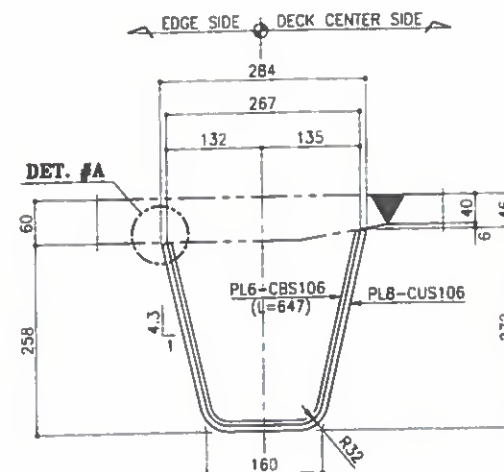
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

USC06

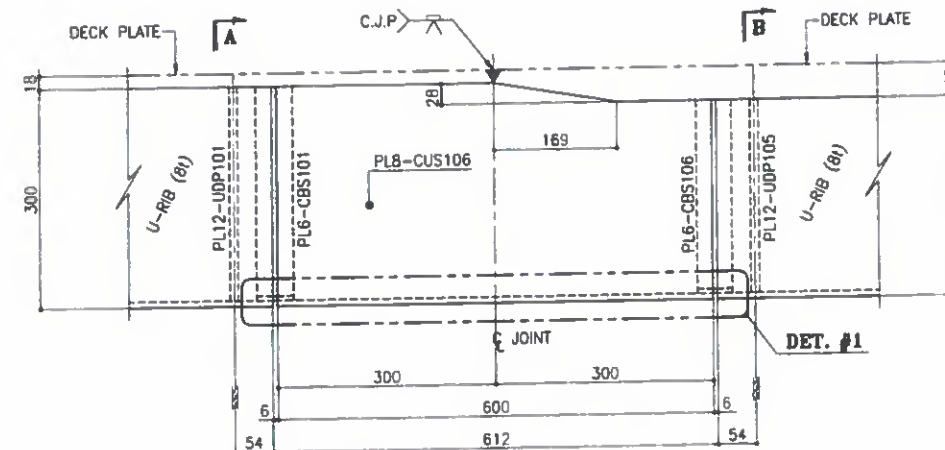
U-RIB : 8*300*300



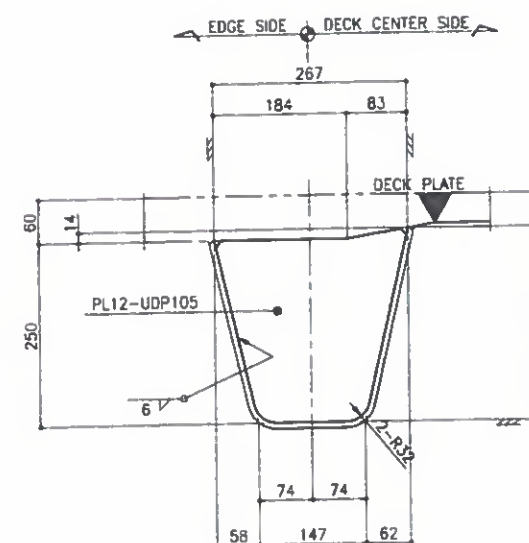
EDGE SIDE



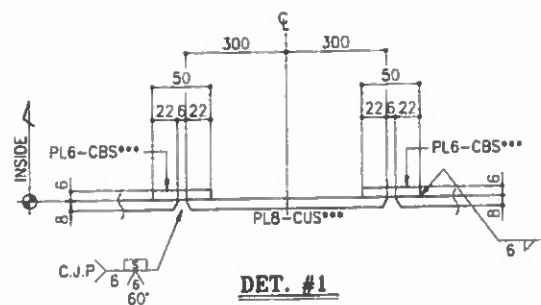
SECT. A



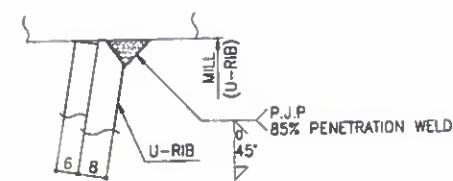
DECK CENTER SIDE



SECT. B



DET. #1



DET. #A

KEY-PLAN

NOTES

1. MATERIALS SEE B.O.W. UNLESS NOTED
2. SCALLOP R= .35, C= .30 UNLESS NOTED
3. ALL FILLET WELD:  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2016.07.25	FOR APPROVAL	K.L.PARK	S.S.SONG	S.M.KHON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-A (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR




DRAWING NO.

RA140-22-BRG-SD-STD-104

REV

A

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

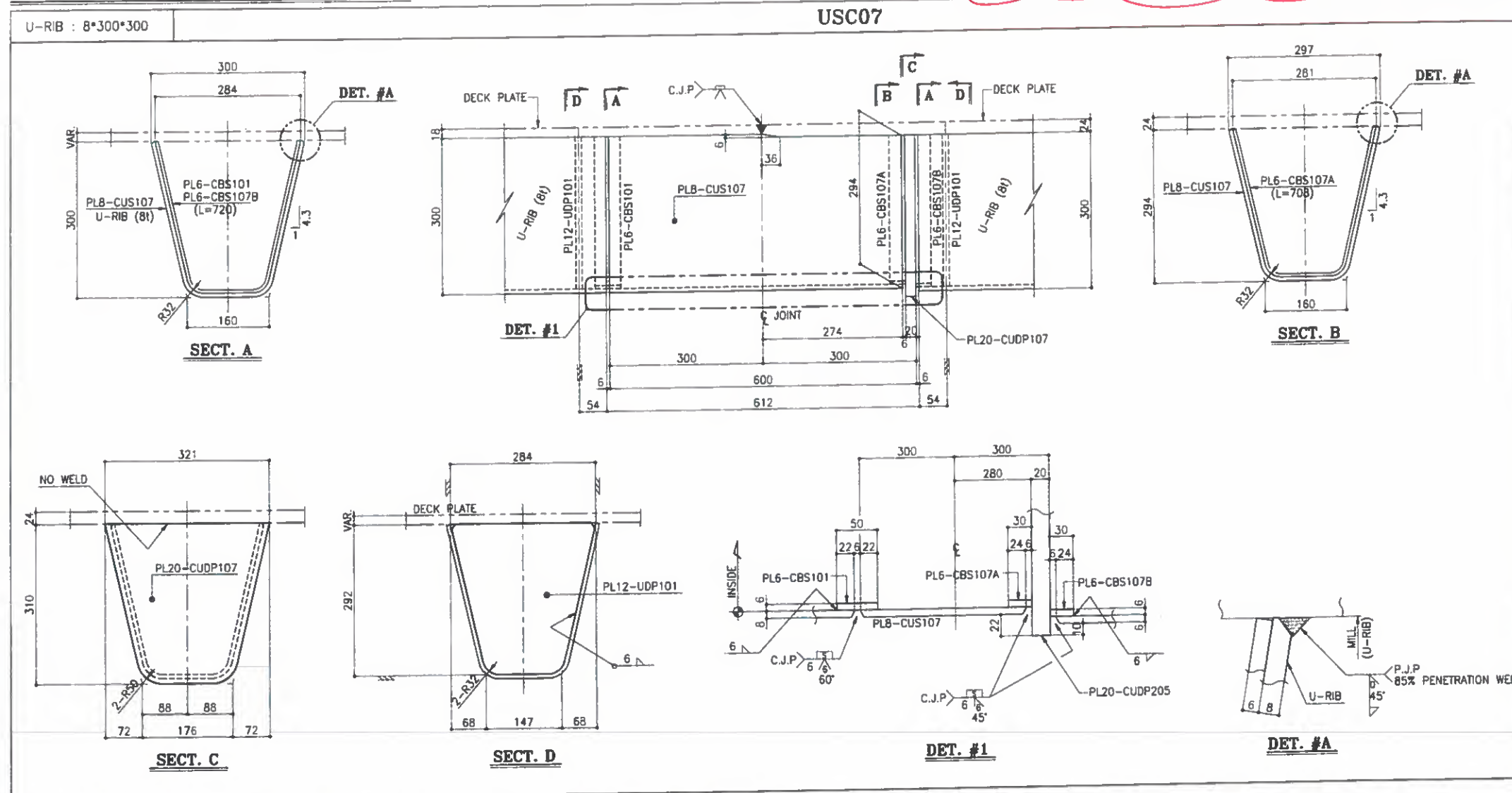
U-RIB CONNECTION DETAIL [SHOP CONNECTION]

Refer To comments on Dhw.#
SD-STD-101 & 001.

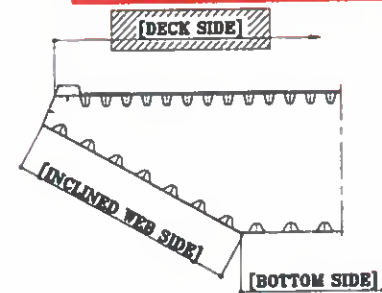
BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC07	<U-RIB CONN.>	SET	ONE			
CUS107	PL 6*744	574	1	27	A709M Gr.345	
CBS101	PL 6*50	720	1	2	A709M Gr.345	
CBS107A	PL 6*30	708	1	1	A709M Gr.345	
CBS107B	PL 6*30	720	1	1	A709M Gr.345	
UDP101	PL 12*284	292	2	16	A709M Gr.345	
CUDP107	PL 20*321	310	1	16	A709M Gr.345	
S.TOTAL =				62		

A. U-RIB SHOP CONNECTION [DECK SIDE]



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SLOPE 1/25, 1/10 UNLESS NOTED
3. ALL FILLET WELD: 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-A (5)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON

DATE ISSUED: 2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION **Combined Group**

DRAWING NO.
RA140-22-BRG-SD-STD-105

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

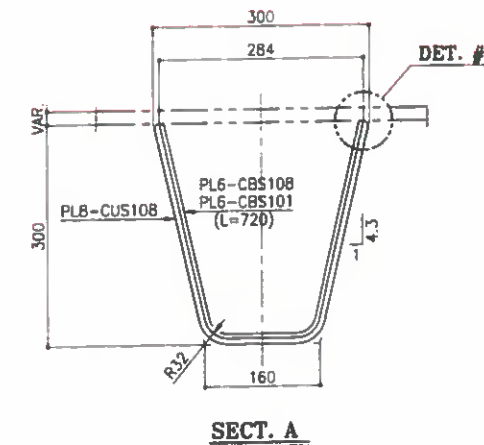
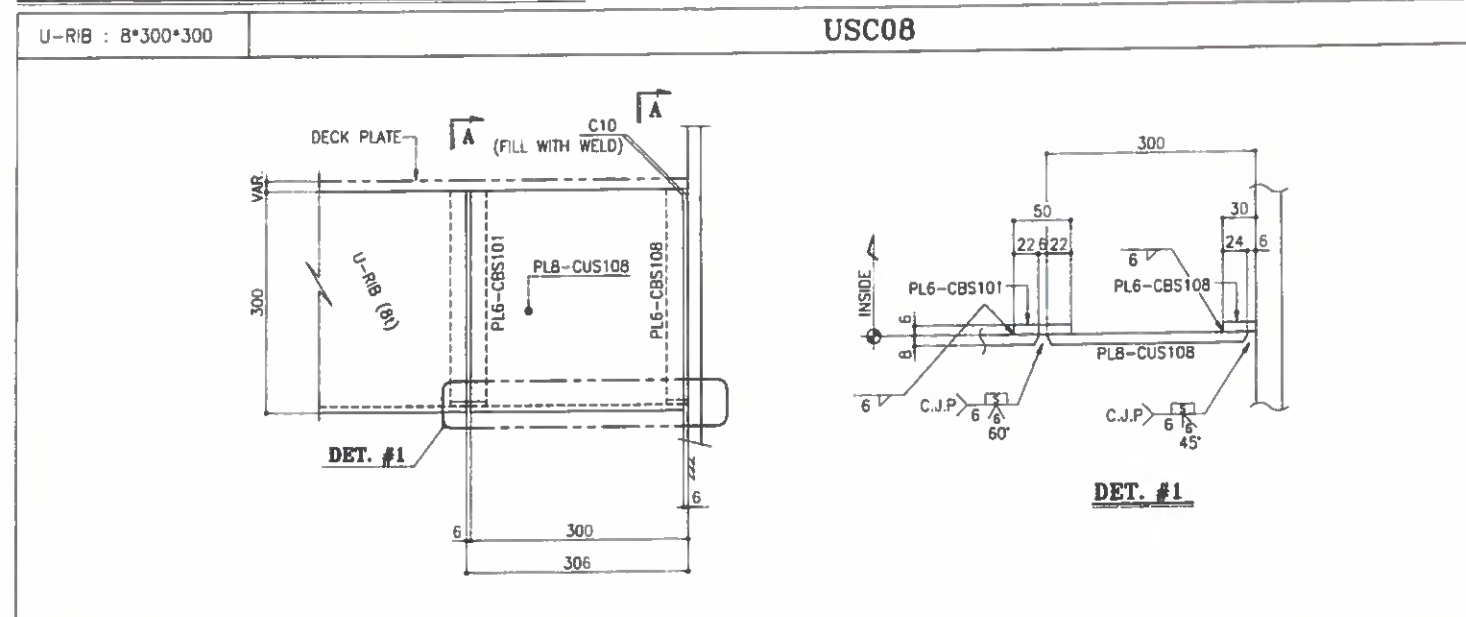
U-RIB CONNECTION DETAIL [SHOP CONNECTION]

Refer To comments on Dnw.
SD-STD-101 2001.

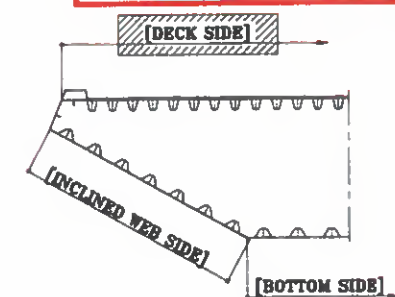
BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC08	<U-RIB CONN.>	SET	ONE			
CUS108	PL B*744	294	1	14	A709M Gr.345	
CBS101	PL 6*50	720	1	2	A709M Gr.345	
CBS108	PL 6*30	720	1	1	A709M Gr.345	
	S.TOTAL =			16		
USC09	<U-RIB CONN.>	SET	ONE			
CUS109	PL B*744	316	1	15	A709M Gr.345	
CBS101	PL 6*50	720	1	2	A709M Gr.345	
	S.TOTAL =			16		

A. U-RIB SHOP CONNECTION [DECK SIDE]



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R=25, C=10 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

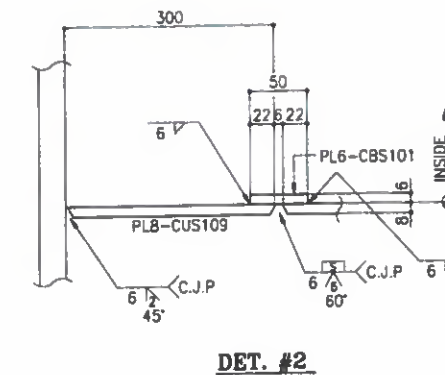
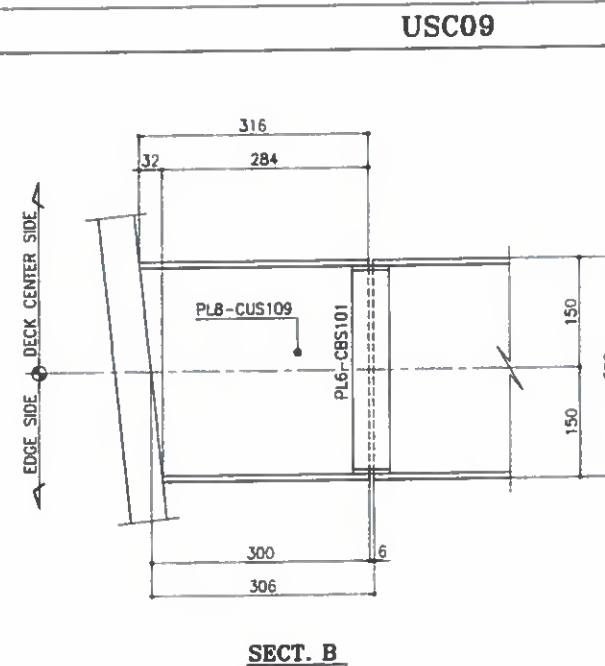
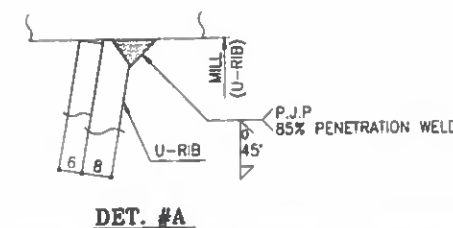
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-A (6)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-STD-106

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



EDGE SIDE DECK CENTER SIDE

SECT. B

DET. #2

DET. #A

Refer To Comments on Drw. #
SD-STD-101 & 001.

U-RIB : 8*300*296

USC10

DECK CENTER SIDE EDGE SIDE

DET. #1

SECT. A

DET. #A

DET. #1

INSIDE

Technical drawing of a U-rib assembly showing three views: a side view, a cross-section (SECT. A), and a detail view (DET. #1). The side view shows a U-rib with a deck plate, C10 channel, and various welds (PL6-CBS110B, PL6-CBS110A, PL6-CBS110B). Dimensions include 300, 306, 296, 279, 141, 138, 60, 284, 160, 4.4, 4.3, 1, 6, 30, 24, 50, 22, 22, 6, 6, 6, 6, 45, 60. The cross-section (SECT. A) shows the U-rib profile with dimensions 296, 279, 141, 138, 60, 284, 160, 4.4, 4.3, 1, 6, 30, 24, 50, 22, 22, 6, 6, 6, 6, 45, 60. The detail view (DET. #1) shows a close-up of the welds and dimensions 300, 306, 296, 279, 141, 138, 60, 284, 160, 4.4, 4.3, 1, 6, 30, 24, 50, 22, 22, 6, 6, 6, 6, 45, 60.

U-RIB : 8*300*296

U-RIB (B)

DECK PLATE

C10 (FILL WITH WELD)

PLB-CBS110A

PLB-CBS111

DET. #2

300

284

6

300

306

SECT. B

DECK CENTER SIDE

EDGE SIDE

296

279

141

138

DET. #A

60

4.3

1

284

160

R12

PLB-CBS110A

PLB-CBS111 (L=70)

PLB-CBS111

DET. #2

300

50

22.5

22

6

30

24

6

INSIDE

PLB-CBS110A

PLB-CBS111

PLB-CBS111

C.J.P

6

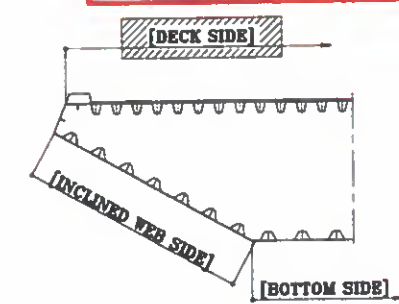
60

6

45

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC10	<U-RIB CONN >	SET	ONE			
CUS110	PL 8*726	294	1	13	A709M	Gr.345
CBS110A	PL 6*50	701	1	2	A709M	Gr.345
CBS110B	PL 6*30	701	1	1	A709M	Gr.345
		S.TOTAL =		16		
USC11	<U-RIB CONN >	SET	ONE			
CUS111	PL 8*726	294	1	13	A709M	Gr.345
CBS110A	PL 6*50	701	1	2	A709M	Gr.345
CBS111	PL 6*30	701	1	1	A709M	Gr.345
		S.TOTAL =		16		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2011.02.25	FOR APPROVAL	H. PARK	S. SONG	S. MOON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

REV.	DATE
EMPLOYER	

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-A (7)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

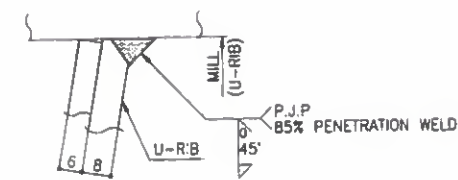


DRAWING NO.

RA140-22-BRG-SD-STD-107

REV.

A



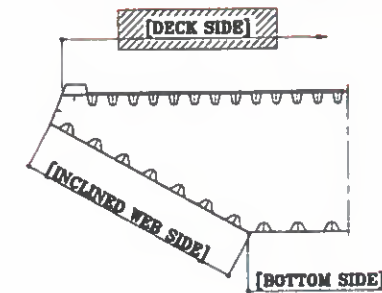
DET. #A

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

Refer To comments on Draw. #
SD-STD-101 & 001.

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC12	<U-RIB CONN.>		SET ONE			
CUS112	PL 10*654	294	1	15	A709M	Gr.345
CBS112A	PL 6*50	628	1	1	A709M	Gr.345
CBS112B	PL 6*30	628	1	1	A709M	Gr.345
			S.TOTAL =	17		
USC13	<U-RIB CONN.>		SET ONE			
CUS113	PL 8*726	600	1	27	A709M	Gr.345
CBS110A	PL 6*50	701	2	3	A709M	Gr.345
UDP113	PL 12*292	279	2	15	A709M	Gr.345
			S.TOTAL =	46		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *M.J. Lee*



NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R= 35 , ϕ 10 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SHOP CONNECTION DETAIL-A (8)




DRAWING NO.	REV.
RA140-22-BRG-SD-STD-108	A

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

U-RIB CONNECTION DETAIL [SHOP CONNECTION]

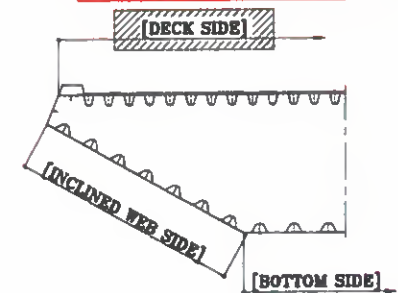
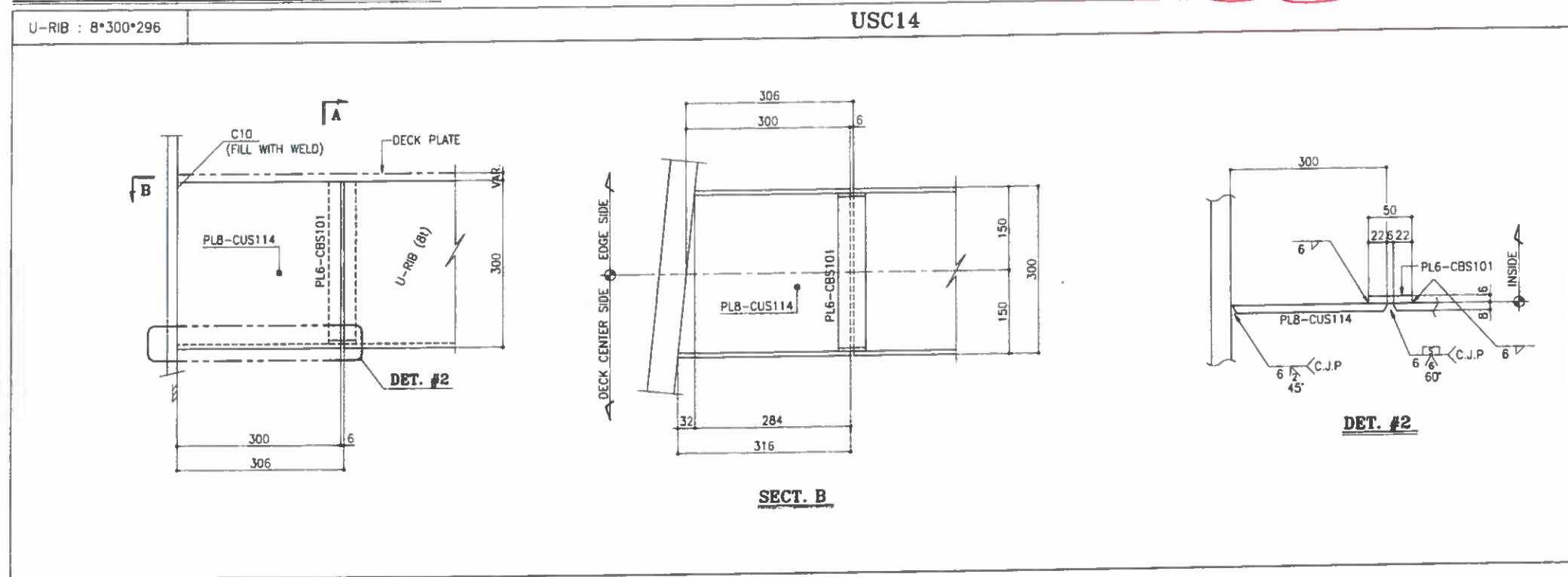
Refer To Comments on DWG. #
SD-STD-101 & 001.

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC14	<U-RIB CONN>		SET ONE			
CUS114	PL 8*744	300	1	14	A709M Gr.345	
CBS101	PL 6*50	720	1	2	A709M Gr.345	
S.TOTAL =				16		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

A. U-RIB SHOP CONNECTION [DECK SIDE]



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. ROLLUP R-36, C-18 mm UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

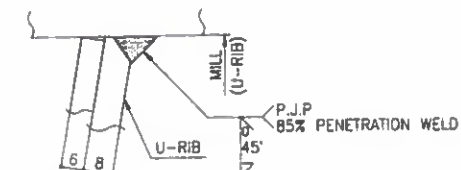
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-A (9)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-STD-109

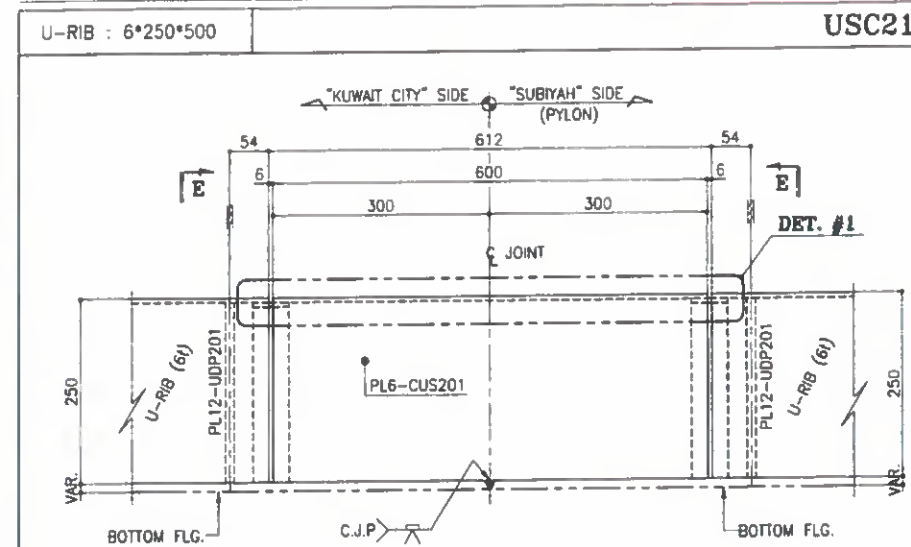
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



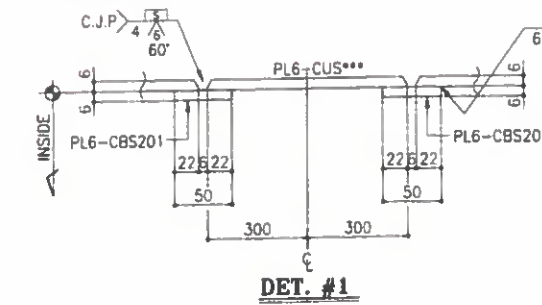
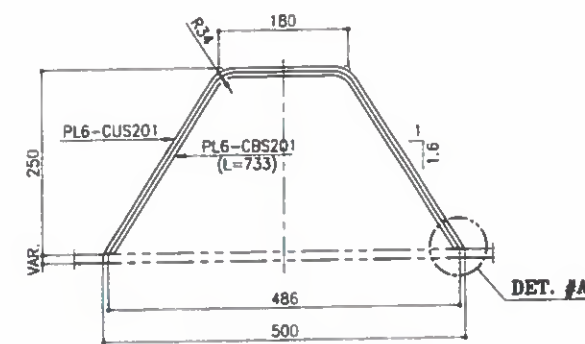
(Refer To comments on DRW. # SD-STD-1012001)

U-RIB CONNECTION DETAIL [SHOP CONNECTION]

B. U-RIB SHOP CONNECTION [BOTTOM SIDE]



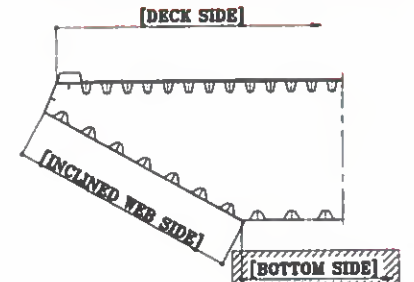
USC21



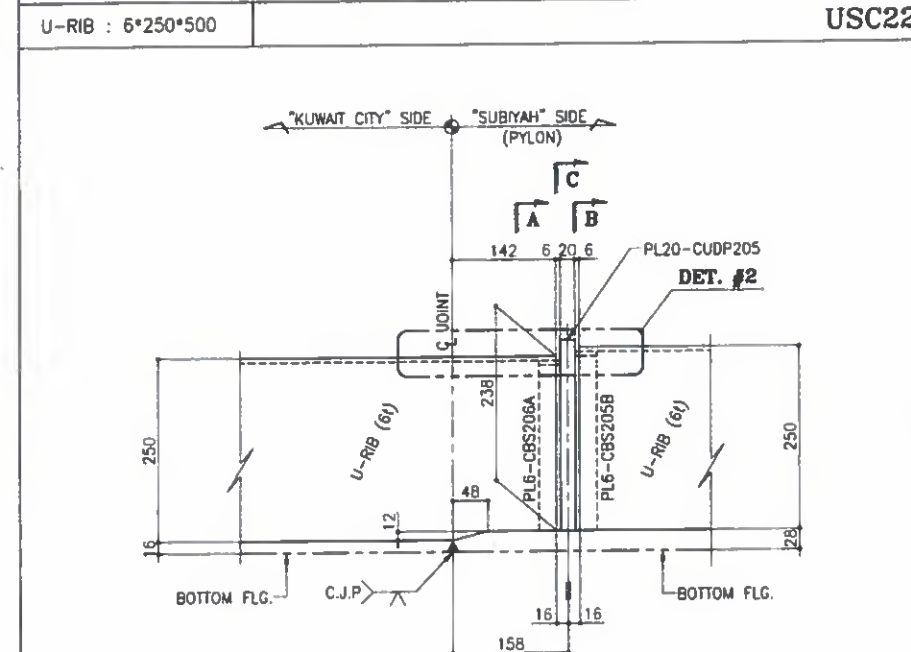
DET. #1

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC21	<U-RIB CONN>	SET	ONE			
CUS201	PL 6*756	600	1	21	A709M Gr.345	
CBS201	PL 6*50	733	2	3	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
S.TOTAL=				47		
USC22	<U-RIB CONN>	SET	ONE			
CUOP205	PL 20*260	524	1	21	A709M Gr.345	
CBS206A	PL 6*30	704	1	1	A709M Gr.345	
CBS205B	PL 6*30	733	1	1	A709M Gr.345	
S.TOTAL=				23		

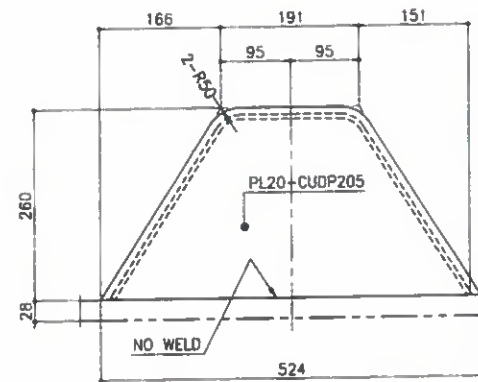
HYUNDAI ENGINEERING & CONSTRUCTION
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



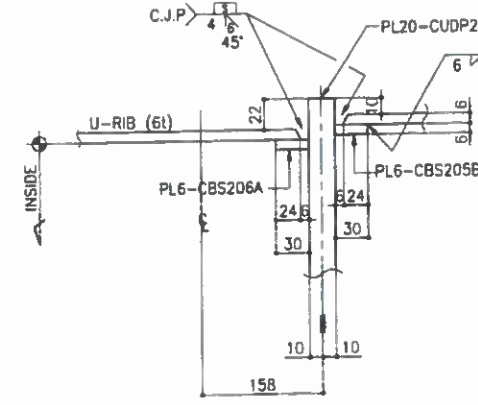
KEY-PLAN



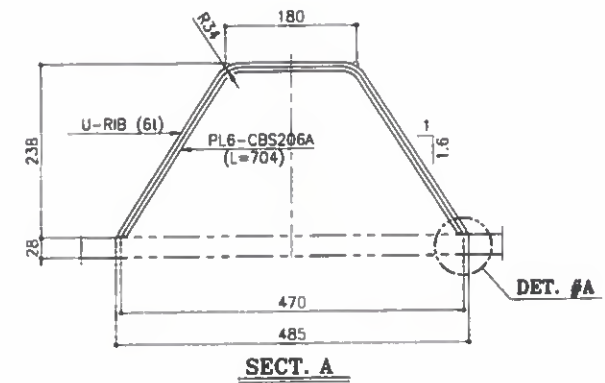
USC22



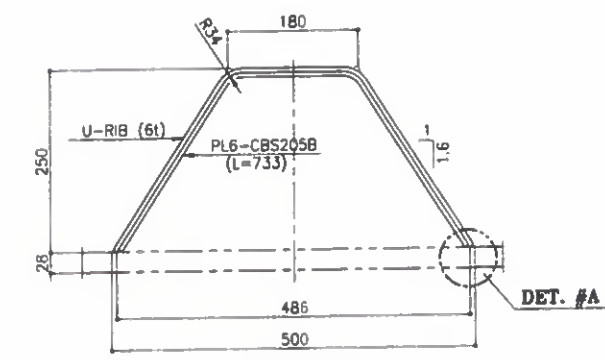
SECT. C



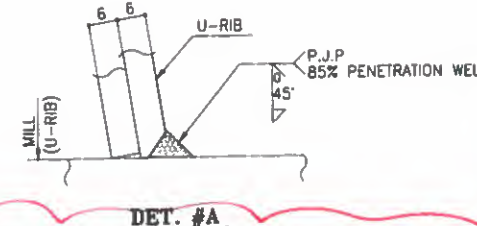
DET. #2



SECT. A



SECT. B



DET. #A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 25, C= 10 UNLESS NOTED
 3. ALL FILLET WELD: 6 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

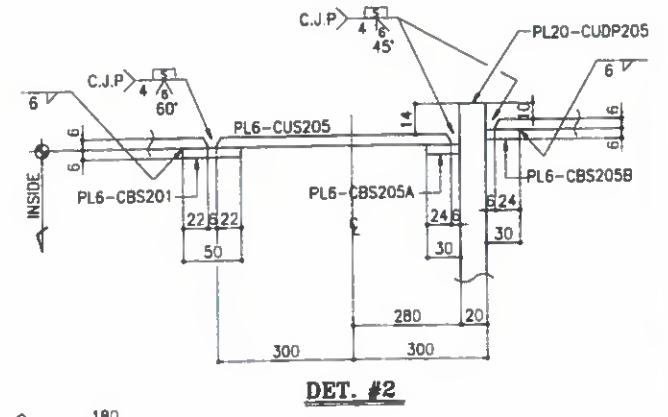
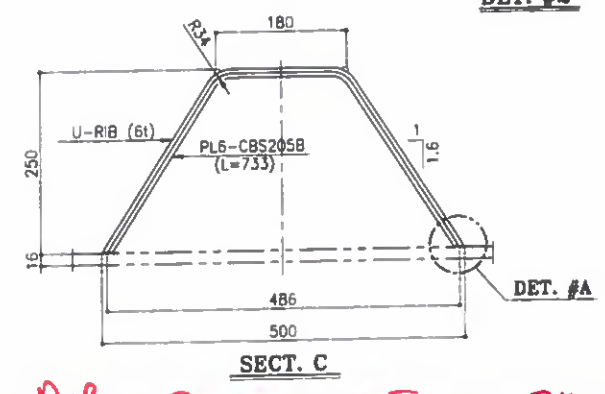
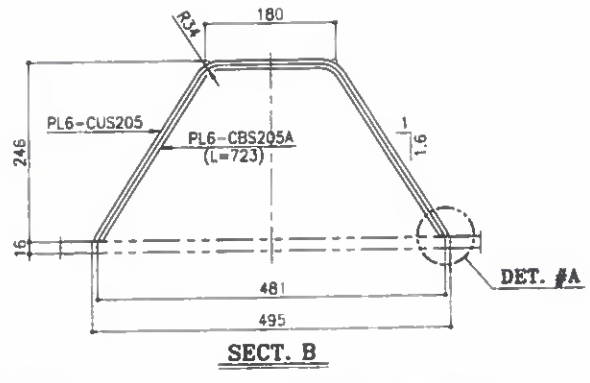
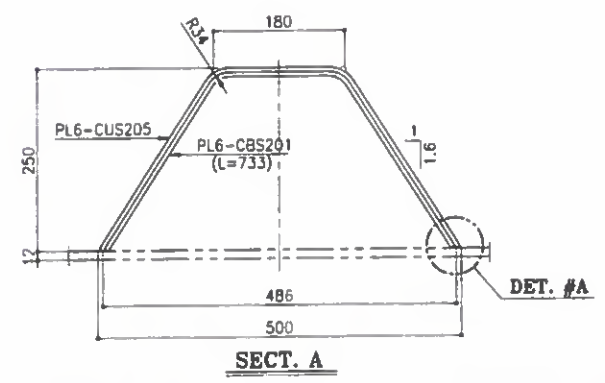
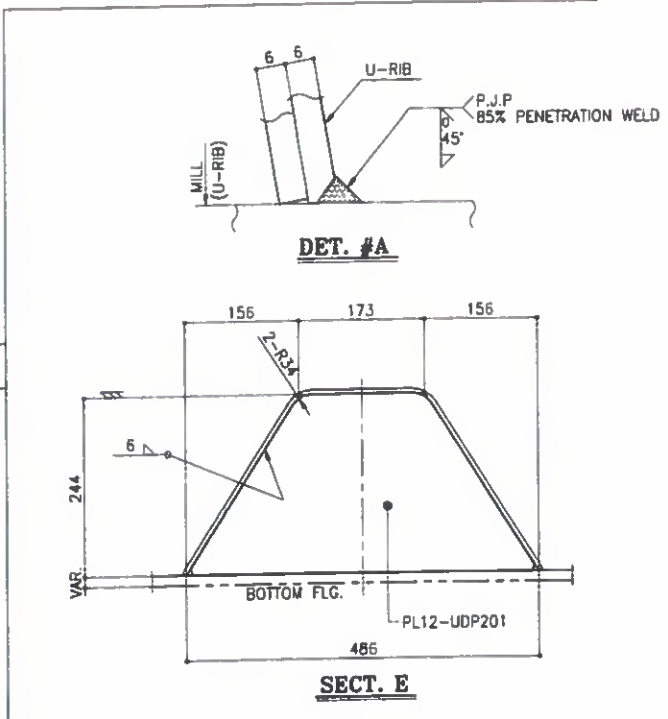
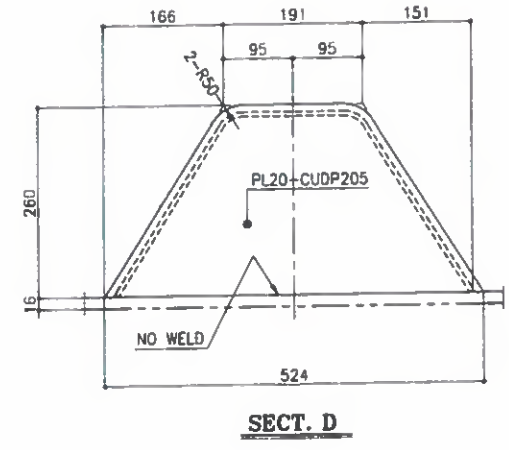
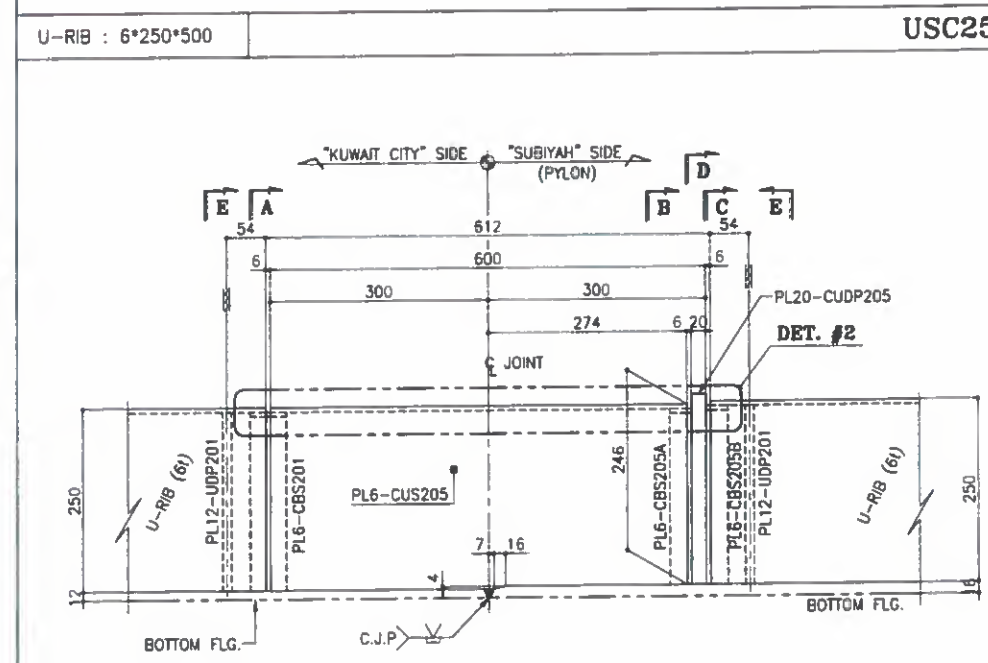
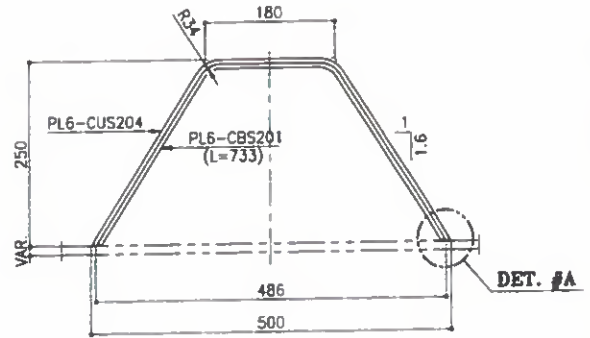
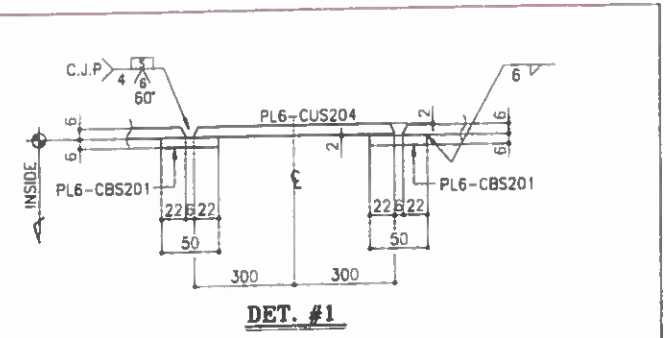
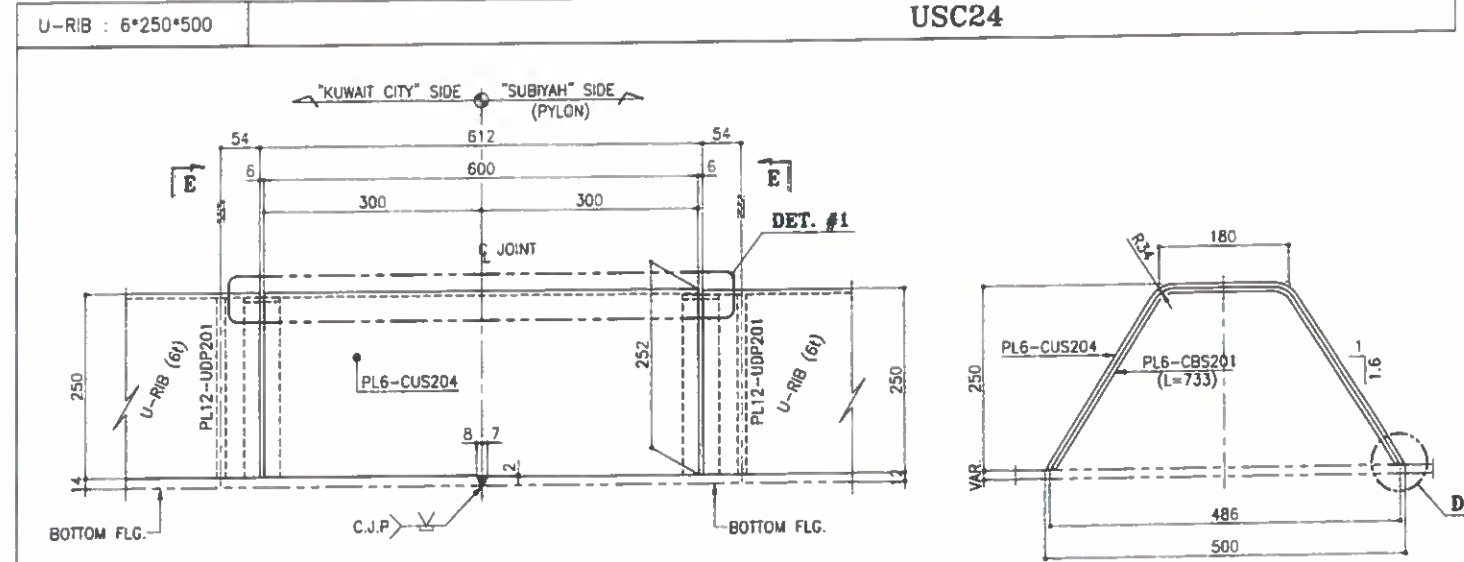
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.		
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON		
EMPLOYER							
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION							
PROJECT TITLE							
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140							
DRAWING TITLE							
MAIN BRIDGE STEEL DECK SHOP CONNECTION DETAIL-B (1)							
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED			
1 : 5	H.I.PARK	K.W. CHOI	S.S.SON	S.M.KHON			
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25			
CONTRACTOR							
HYUNDAI ENGINEERING & CONSTRUCTION Combined Group Engineering & Construction							
DRAWING NO.							
RA140-22-BRG-SD-STD-111							
REV.							
A							

(Refer To comments on DRW. SD-E-101)

(Refer To comments on Drw. # SD-STD-101 & 100)

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

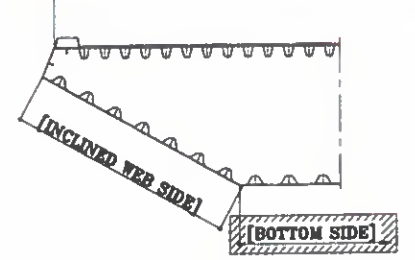
B. U-RIB SHOP CONNECTION [BOTTOM SIDE]



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC24	<U-RIB CONN.>	SET	ONE			
CUS204	PL 6*761	600	1	22	A709M Gr.345	
CBS201	PL 6*50	733	2	3	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
S.TOTAL=				47		
USC25	<U-RIB CONN.>	SET	ONE			
CUS205	PL 6*756	574	1	20	A709M Gr.345	
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS201	PL 6*50	733	1	2	A709M Gr.345	
CBS205A	PL 6*30	723	1	1	A709M Gr.345	
CBS205B	PL 6*30	733	1	1	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
S.TOTAL=				68		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

[DECK SIDE]



KEY-PLAN

- NOTES
1. MATERIALS SEE S.D.B. UNLESS NOTED
 2. SCALLOP R= 35, O= 10 mm UNLESS NOTED
 3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-B (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-112

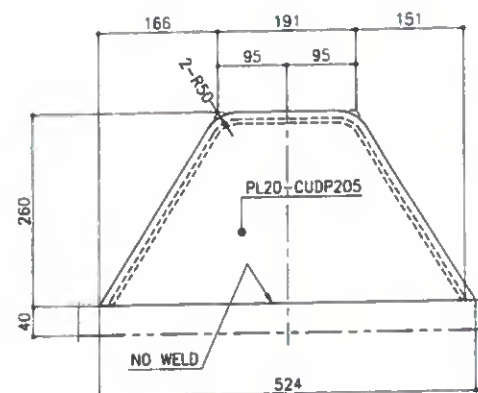
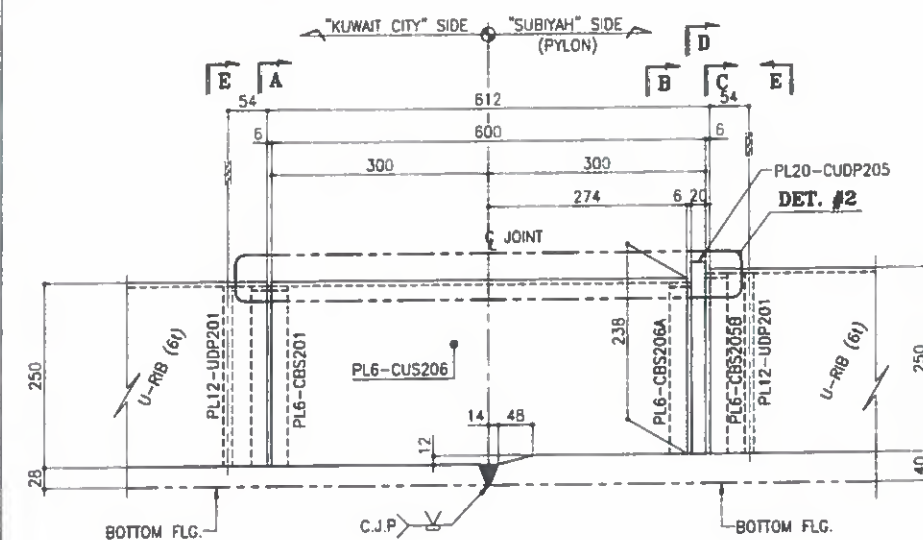
Refer To comments on Drw SD-E-101

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

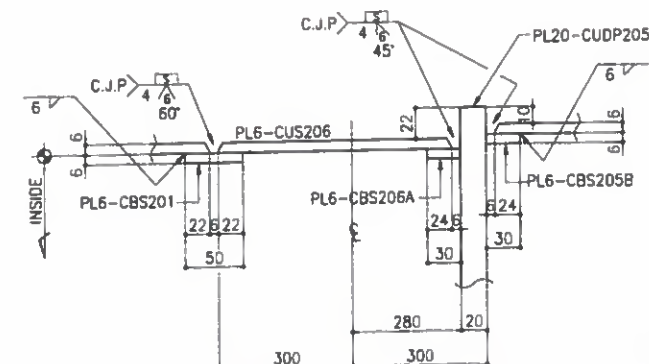
B. U-RIB SHOP CONNECTION [BOTTOM SIDE]

U-RIB : 6*250*500

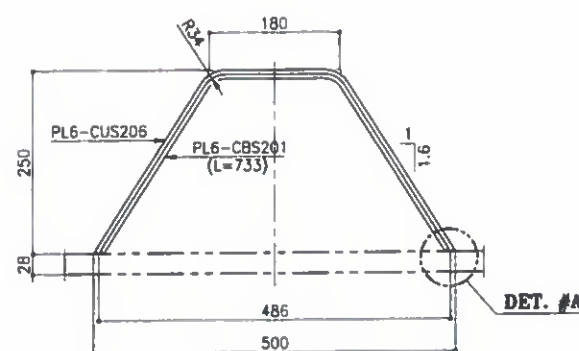
USC26



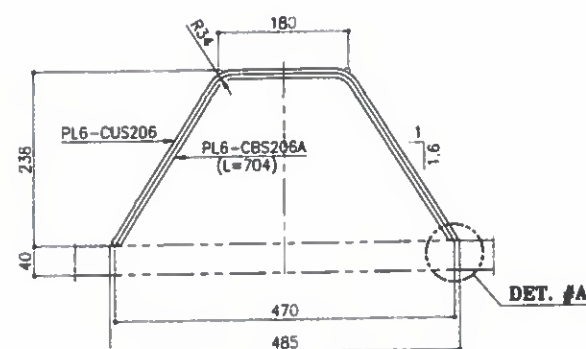
SECT. D



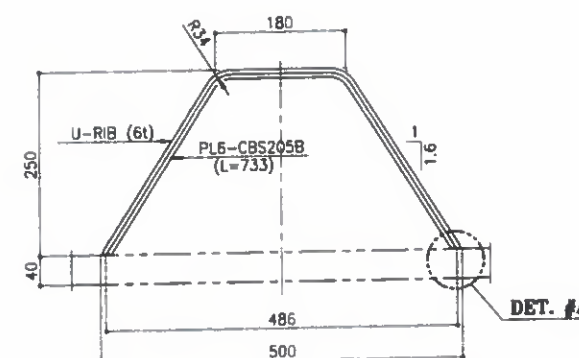
DET. #2



SECT. A



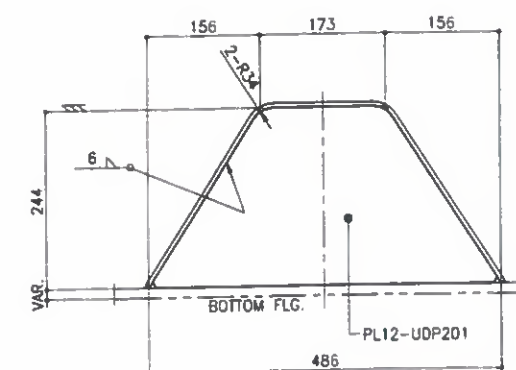
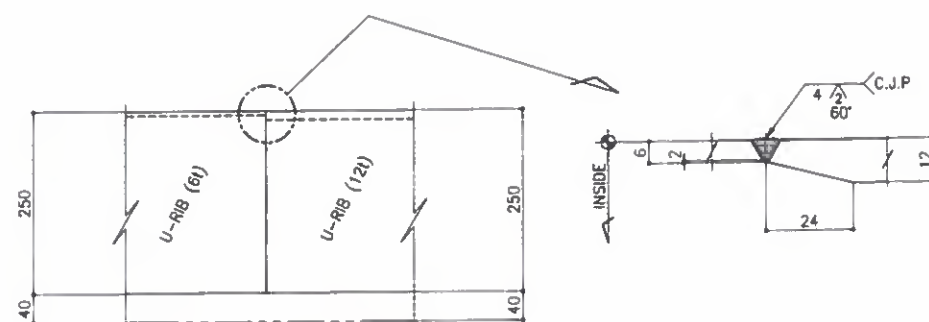
SECT. B



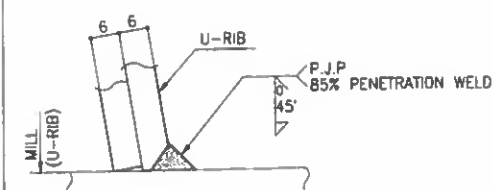
SECT. C

U-RIB : 6*250*500
U-RIB : 12*250*500

USC27



SECT. E

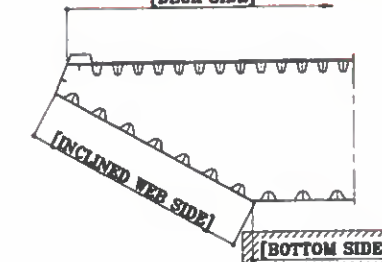


DET. #A

[illegible]

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

[DECK SIDE]



KEY-PLAN

NOTES

1. MATERIALS SEE 3.0.1.1. UNLESS NOTED
2. SCALLOP R= 35 . C= 10 mm UNLESS NOTED
3. ALL FILLET WELD : 6  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

[illegible]

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-B (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



~~DRAWING NO.~~

RA140-22-BRG-SD-STD-113

RED

A

FOR
APPROVAL
2016.02.25
HYUNDAE &
YOULCHON

Refer To Comments on Draw SD-E-10

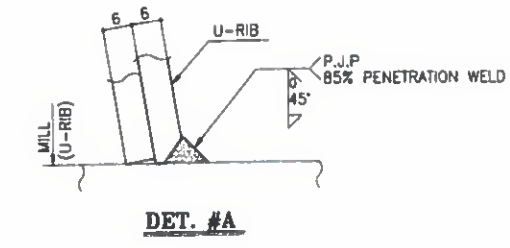
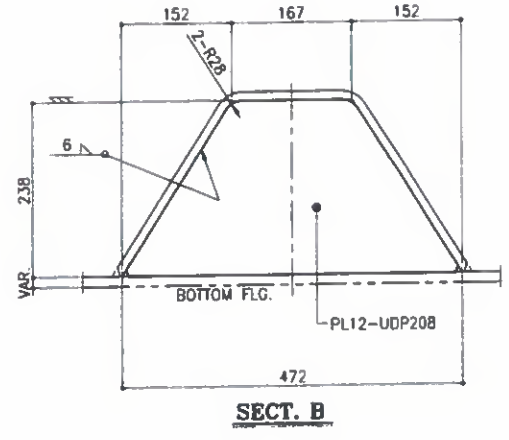
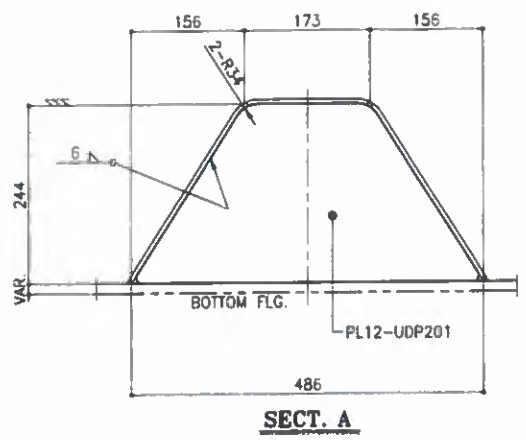
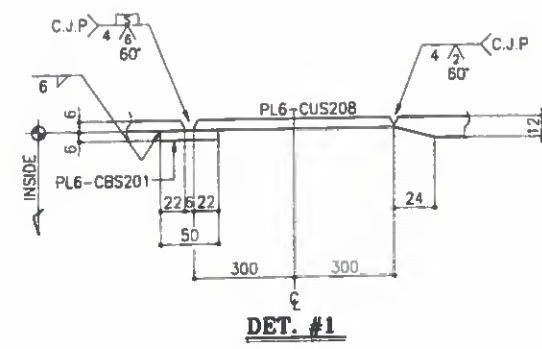
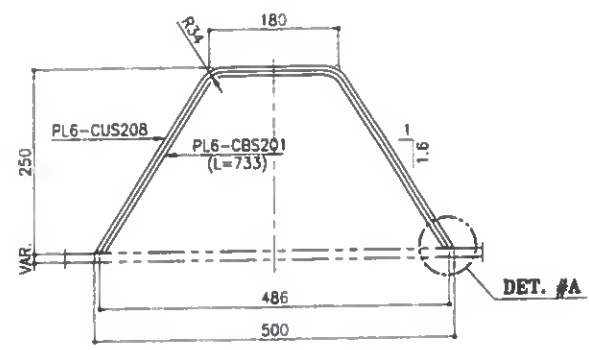
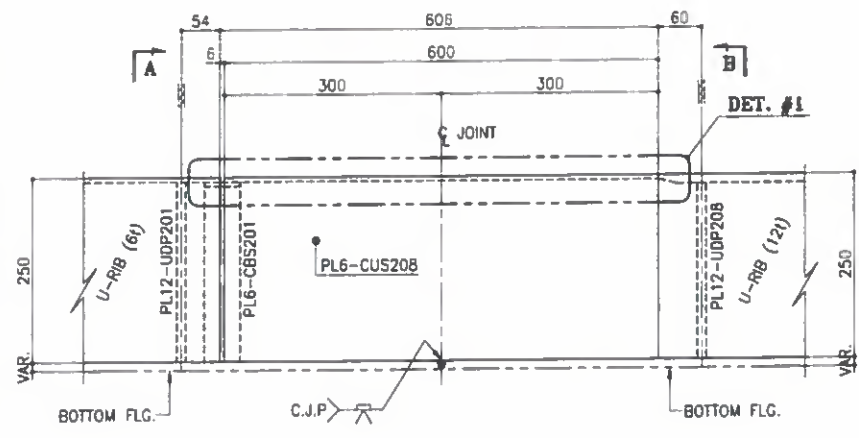
(Refer To Comments on DWG. # SD-STD-101 Rev. 1)

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

B. U-RIB SHOP CONNECTION [BOTTOM SIDE]

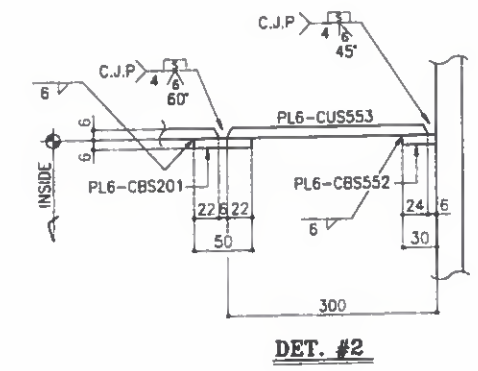
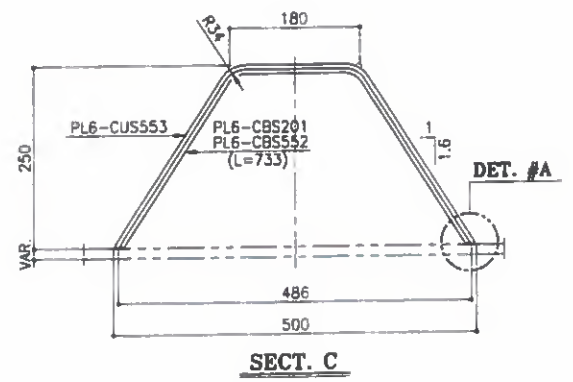
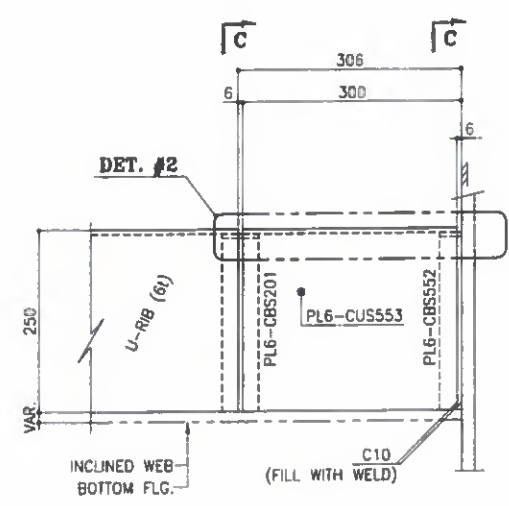
U-RIB : 6*250*500

USC28



U-RIB : 6*250*500

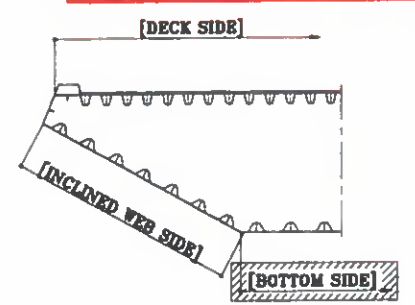
USC29



BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC28	<U-RIB CONN>	SET	ONE			
CUS201	PL 6*756	600	1	21	A709M Gr.345	
CBS201	PL 6*50	733	1	2	A709M Gr.345	
UDP201	PL 12*244	486	1	11	A709M Gr.345	
UDP208	PL 12*238	472	1	11	A709M Gr.345	
S.TOTAL=				45		
USC29	<U-RIB CONN>	SET	ONE			
CUS553	PL 6*756	294	1	10	A709M Gr.345	
CBS201	PL 6*50	733	1	2	A709M Gr.345	
CBS552	PL 6*30	733	1	1	A709M Gr.345	
S.TOTAL=				13		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE 9.9.8. UNLESS NOTED
2. SLOPPED PLATE, D=10 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-B (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SOM	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

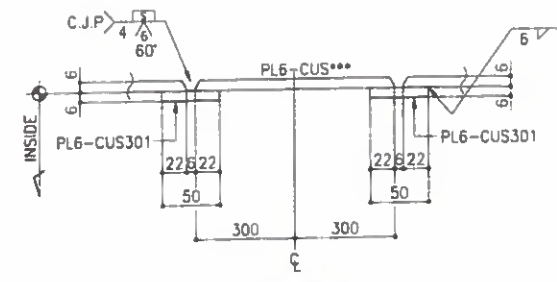
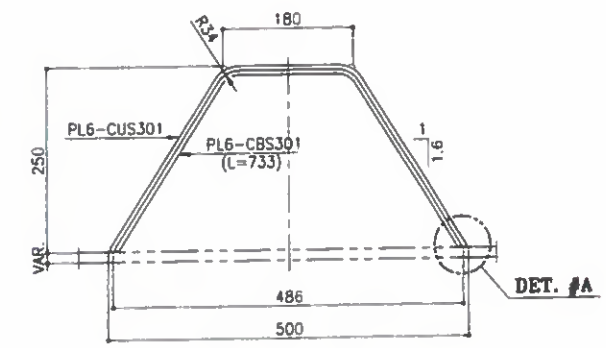
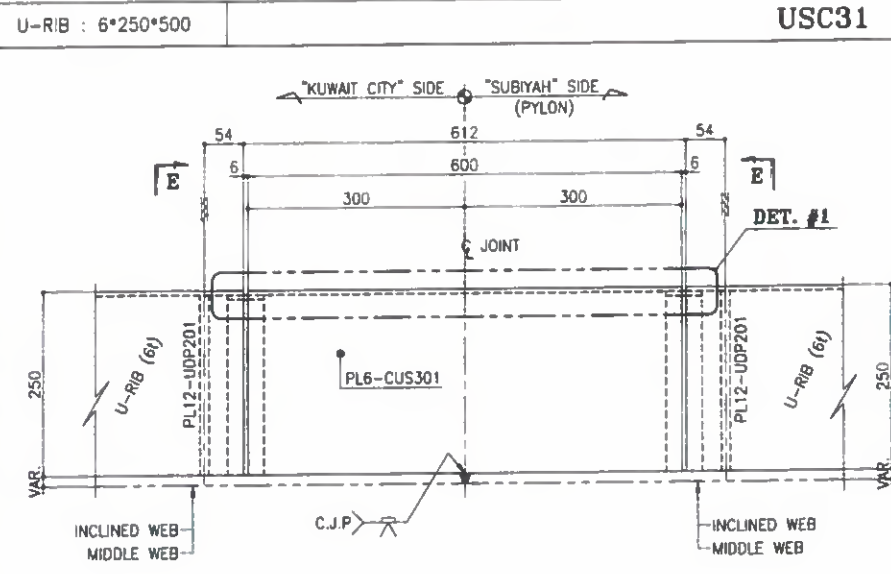
DRAWING NO.
RA140-22-BRG-SD-STD-114
REV.
A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

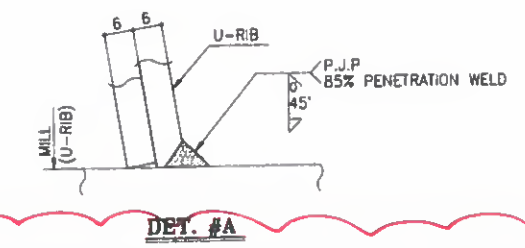
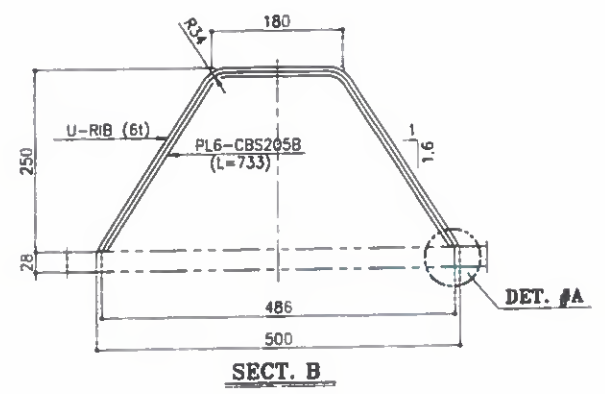
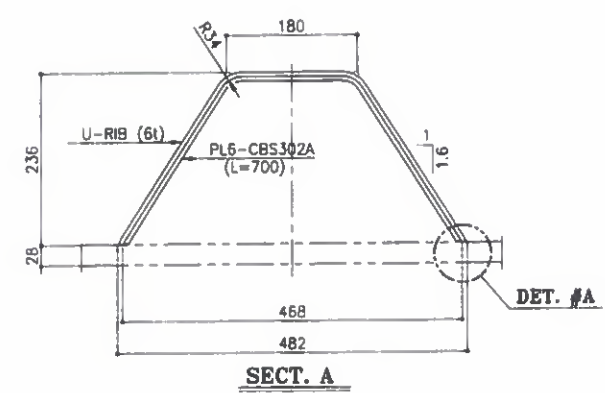
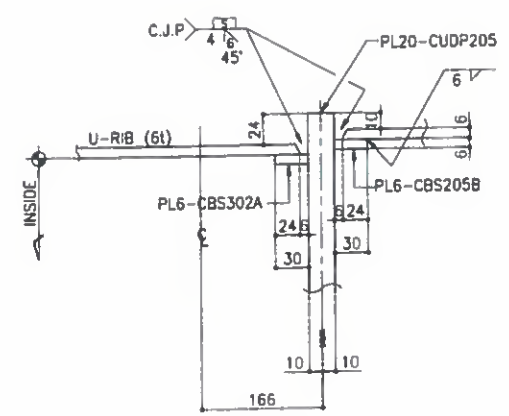
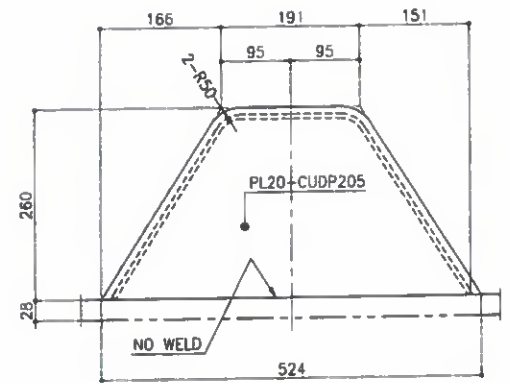
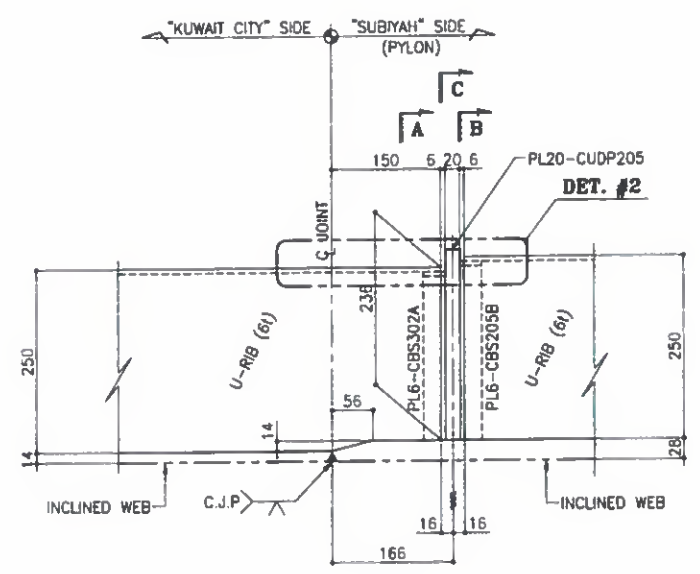
(Refer to comments on DWG. # SD-STD-101 & 001.)

U-RIB CONNECTION DETAIL [SHOP CONNECTION]

C. U-RIB SHOP CONNECTION [INCLINED WEB SIDE]

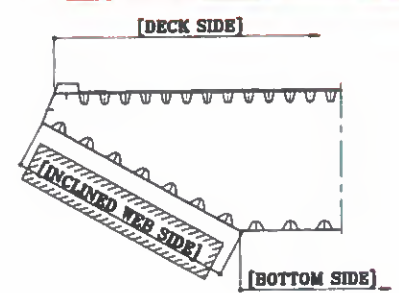


U-RIB : 6*250*500 USC32



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC31	<U-RIB CONN>	SET	ONE			
CUS301	PL 6*756	600	1	21	A709M Gr.345	
CBS301	PL 6*50	733	2	3	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
S.TOTAL=				47		
USC32	<U-RIB CONN>	SET	ONE			
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS302A	PL 6*30	700	1	1	A709M Gr.345	
CBS205B	PL 6*30	733	1	1	A709M Gr.345	
S.TOTAL=				23		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



- NOTES
1. MATERIALS SEE S.O.B. UNLESS NOTED
 2. SCALLOP R= 25, O= 10 UNLESS NOTED
 3. ALL FILLET WELD : 8 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONW	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SHOP CONNECTION DETAIL-C (1)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1 : 5	H.I.PARK	K.W.CHOI	S.S.SONW	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOULCHON					
DRAWING NO.					
RA140-22-BRG-SD-STD-121					

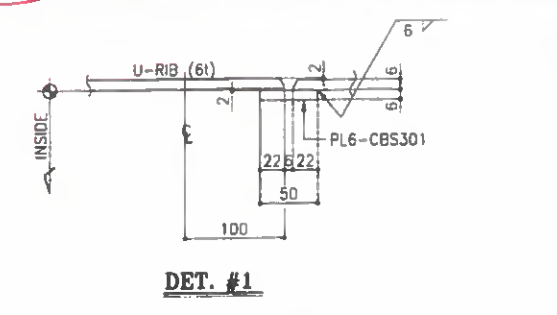
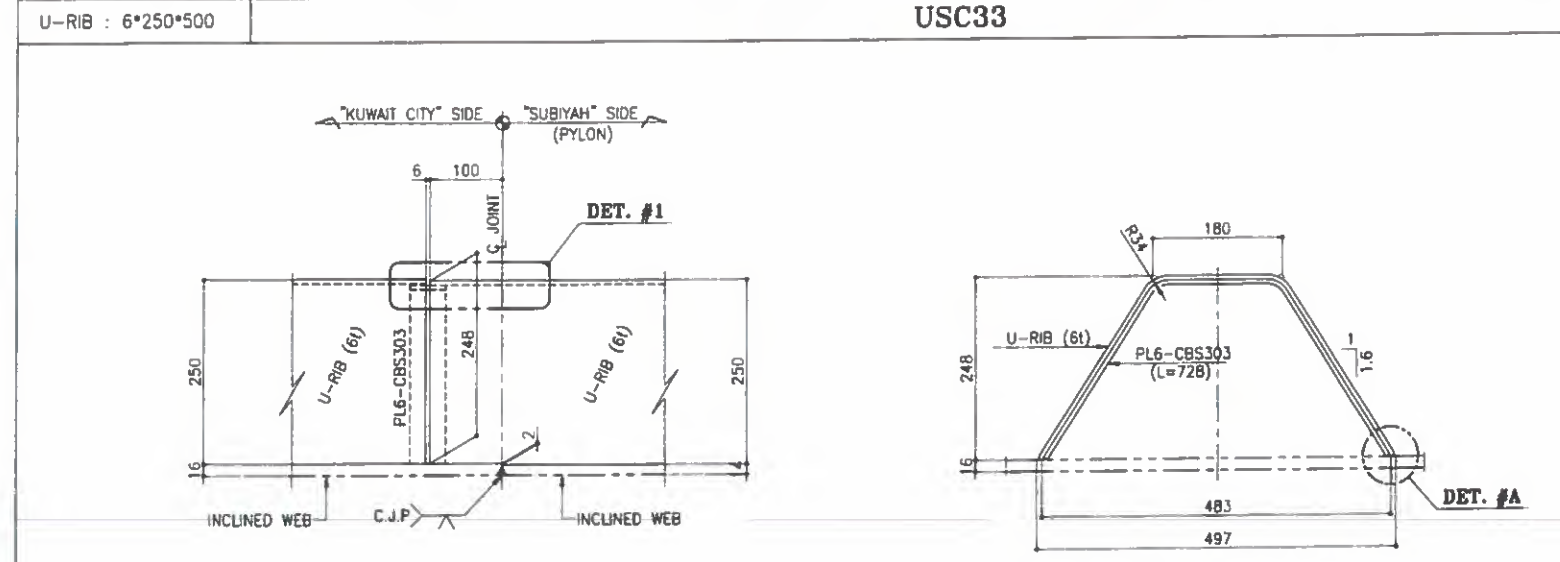
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

(Refer to comments on DWG. SD-E-101)

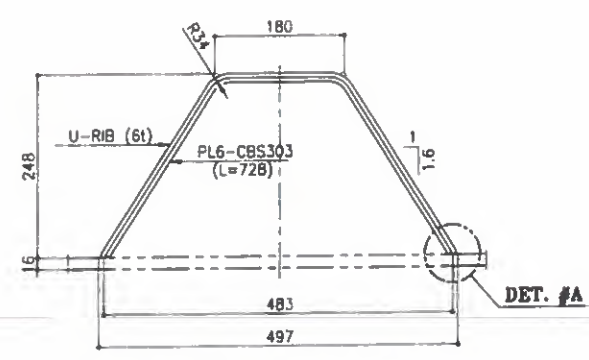
Refer To comments on Draw. # SD-STD-101 & 001

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

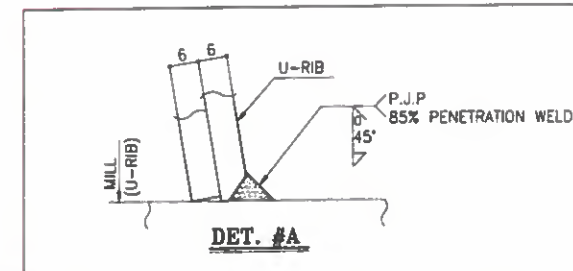
C. U-RIB SHOP CONNECTION [INCLINED WEB SIDE]



DET. #1

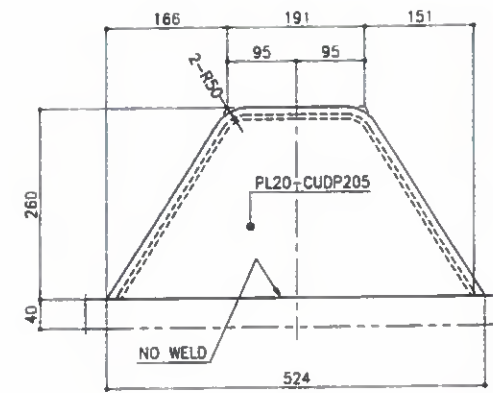
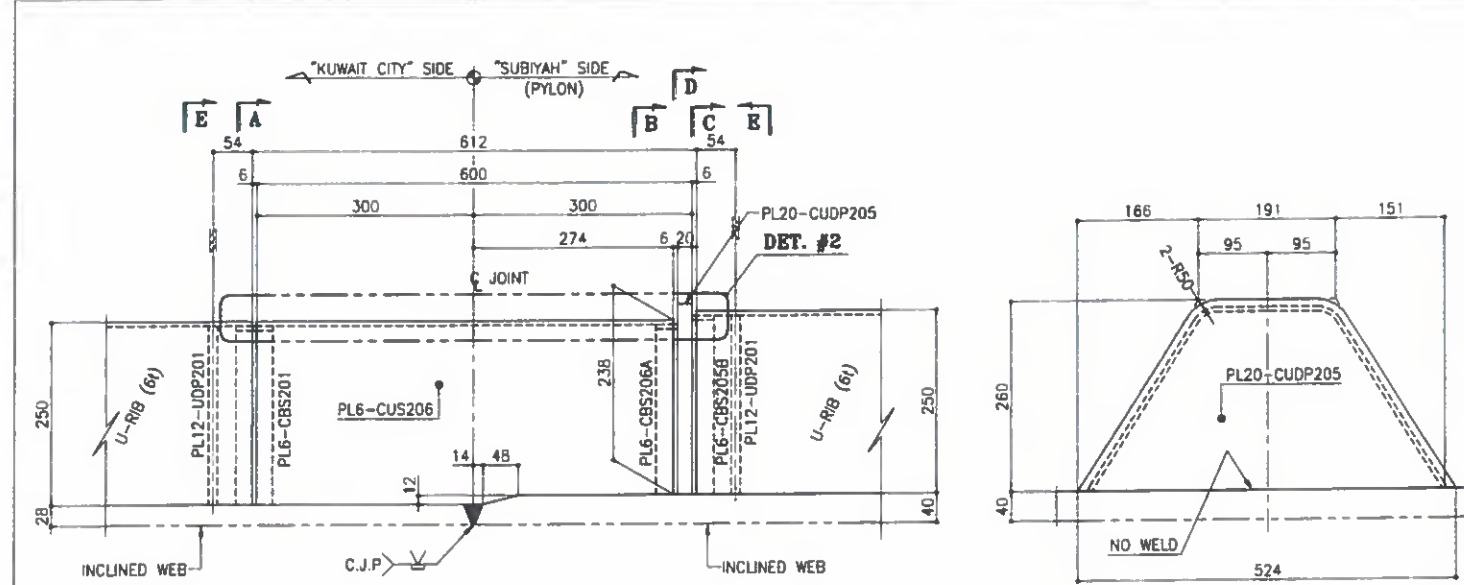


DET. #A

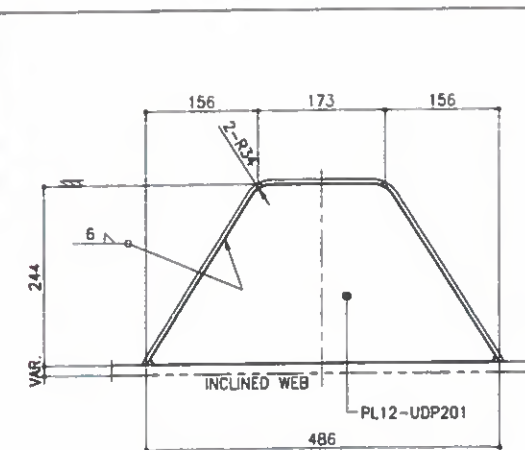


DET. #A

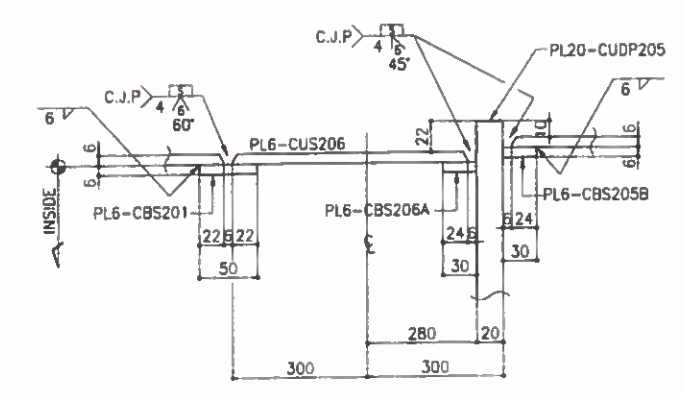
U-RIB : 6*250*500 USC34



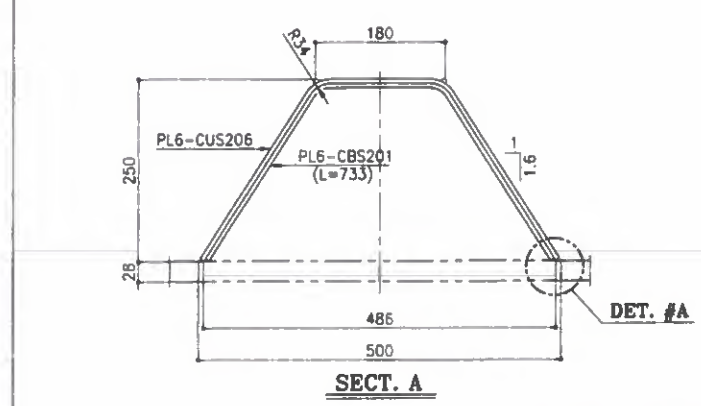
SECT. D



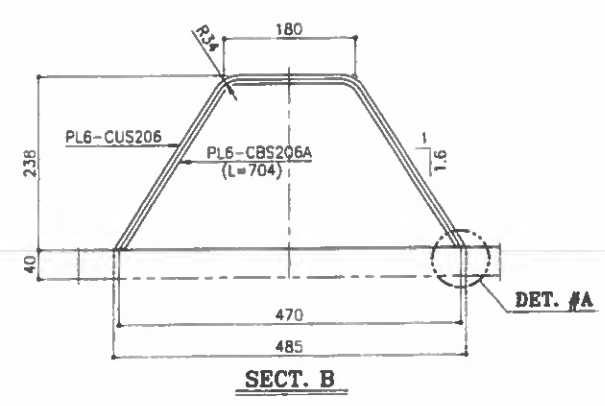
SECT. E



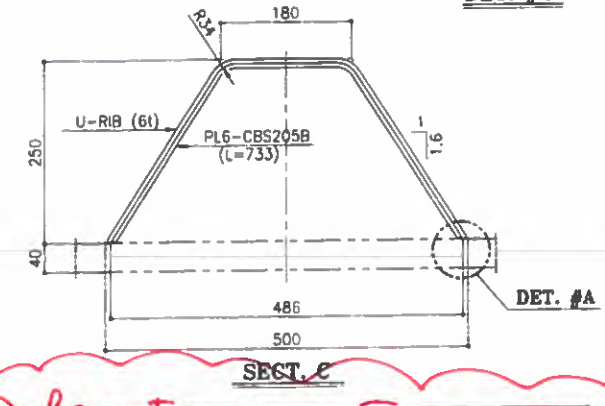
DET. #2



SECT. A



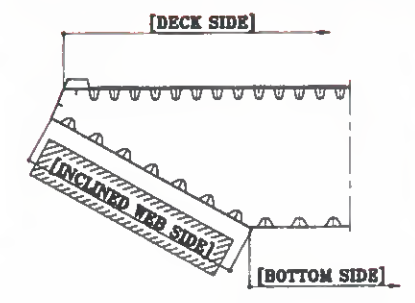
SECT. B



SECT. C

BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK
USC33	<U-RIB CONN.>	SET	ONE		
CBS303	PL 6*50	728	1	2	A709M Gr.345
S.TOTAL=				2	
USC34	<U-RIB CONN.>	SET	ONE		
CUS206	PL 6*756	574	1	20	A709M Gr.345
CUDP205	PL 20*260	524	1	21	A709M Gr.345
CBS201	PL 6*50	733	1	2	A709M Gr.345
CBS206A	PL 6*30	704	1	1	A709M Gr.345
CBS205B	PL 6*30	733	1	1	A709M Gr.345
UDP201	PL 12*244	486	2	22	A709M Gr.345
S.TOTAL=				68	

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

- NOTES
1. MATERIALS SEE 9.0.11. UNLESS NOTED
 2. SLOPE 1: 25, 1: 10 UNLESS NOTED
 3. ALL FILLET WELD: 6 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SHOP CONNECTION DETAIL-C (2)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1: 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI ENGINEERING & CONSTRUCTION					
Combined Group Contracting Company					
DRAWING NO.					
RA140-22-BRG-SD-STD-122					

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

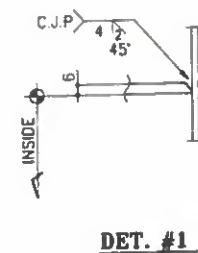
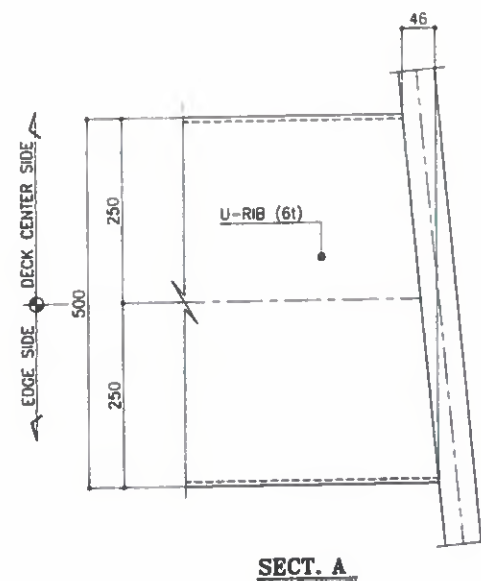
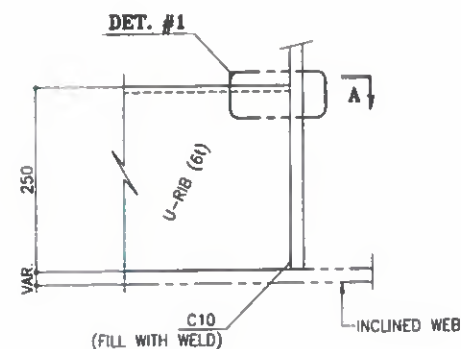
Refer To comments on Draw. SD-E-101

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

C. U-RIB SHOP CONNECTION [INCLINED WEB SIDE]

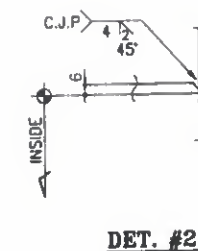
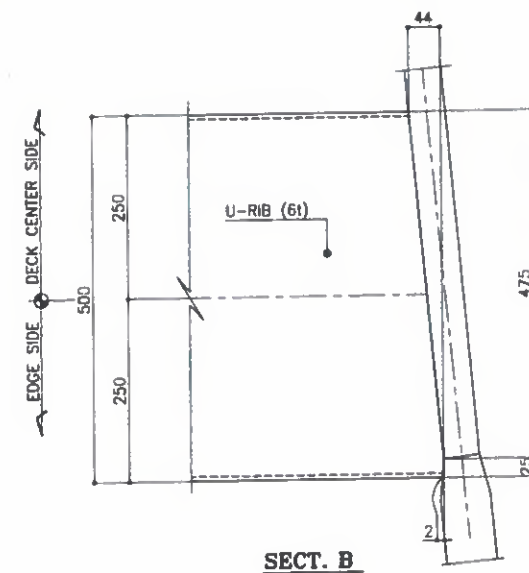
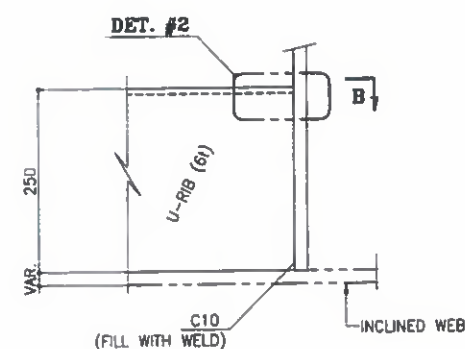
U-RIB : 6*250*500

USC35



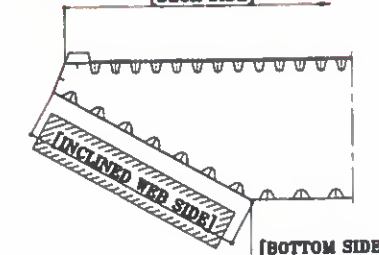
U-RIB : 6*250*500

USC36

[illegible]

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*

[DECK SIDE]



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 19 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2016.02.25	FOR APPROVAL	H. PAREJA	S.S. SANCHEZ	S.M. GARCIA
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROVED

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-C (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KH
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAFTING NO.

RA140-22-BRG-SD-STD-123

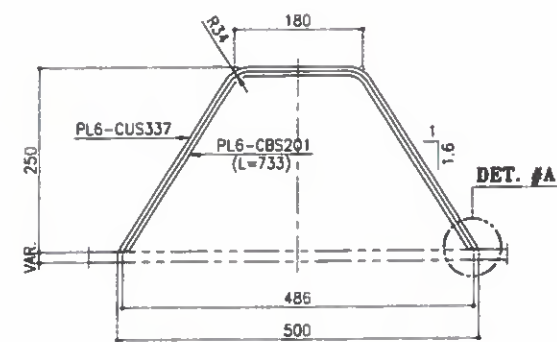
R

1

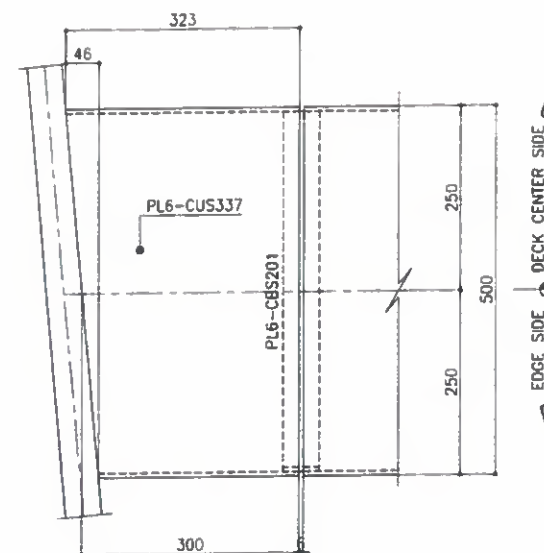
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

U-RIB : 6*250*500

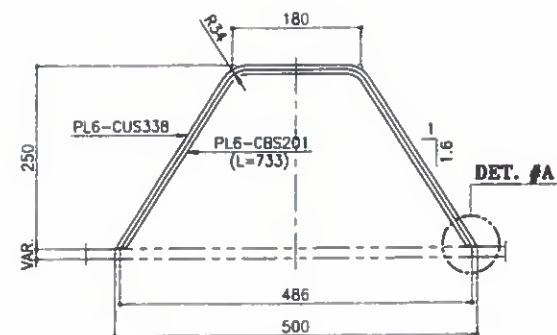


SECT. A

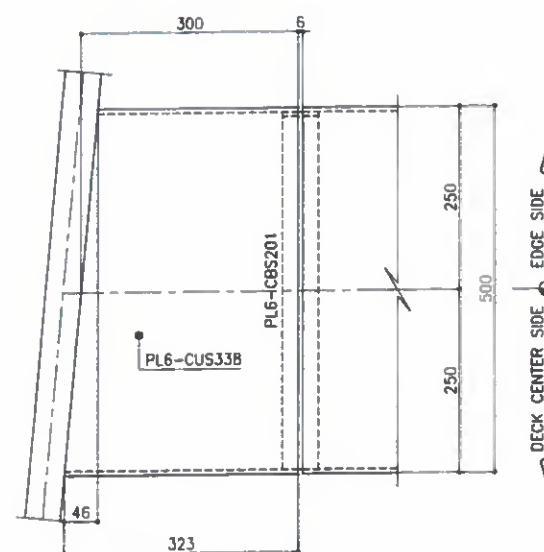


SECT. B

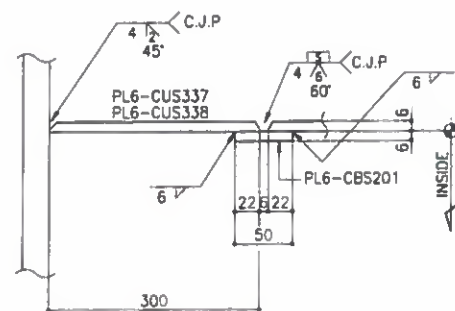
USC38



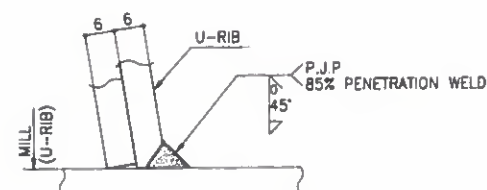
SECT. C



SECT. D

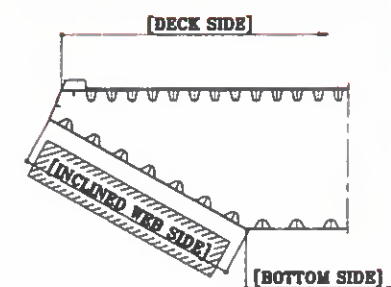


DET. #1



DET. #A

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , D= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2018.02.23	FOR APPROVAL	HL PARK	S.S. SONO	S. MICHIO
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SHOP CONNECTION DETAIL-C (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAWING NO.

RA140-22-BRG-SD-STD-124

REV

A



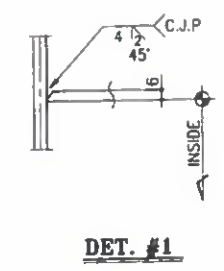
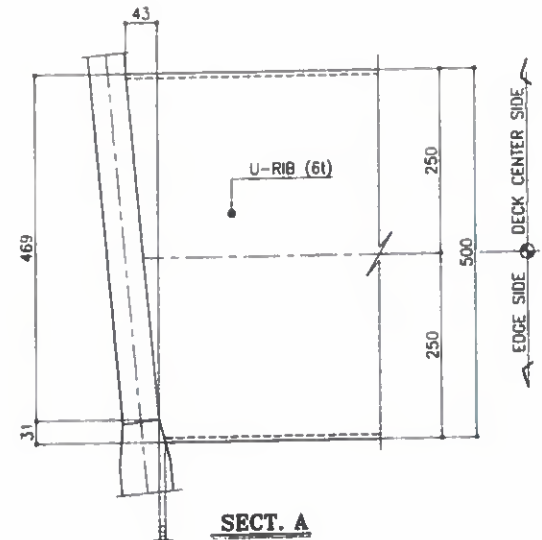
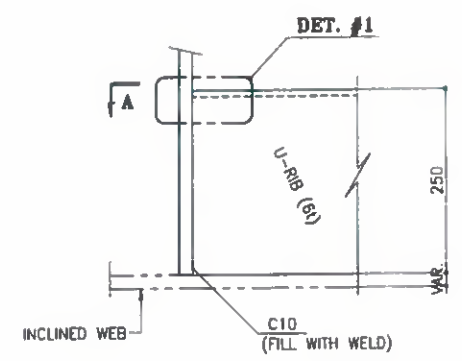
(Refer to comments on drawing # SD-STD-101 2001)

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

C. U-RIB SHOP CONNECTION [INCLINED WEB SIDE]

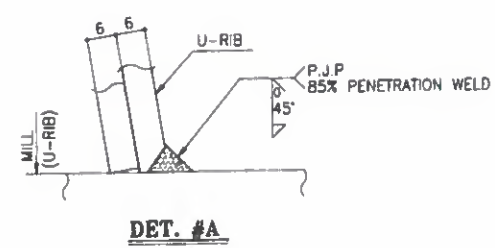
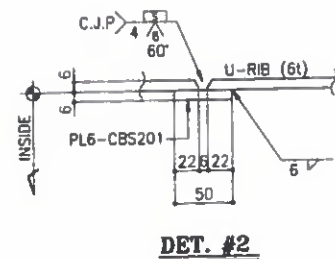
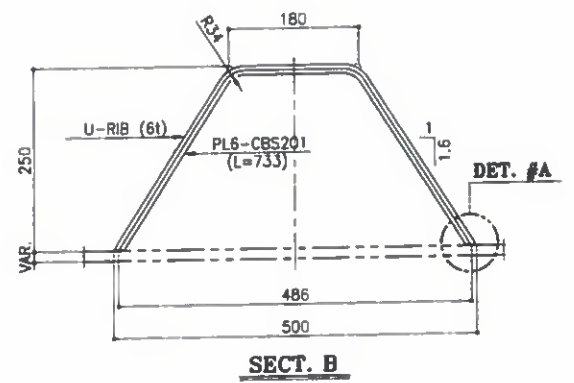
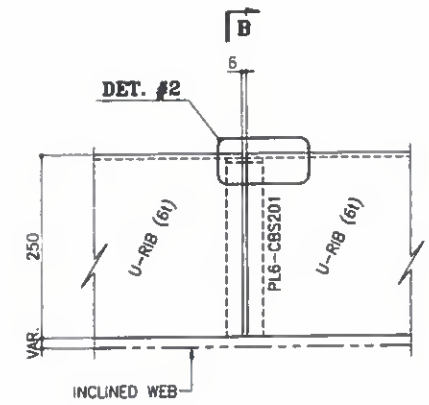
U-RIB : 6*250*500

USC39



U-RIB : 6*250*500

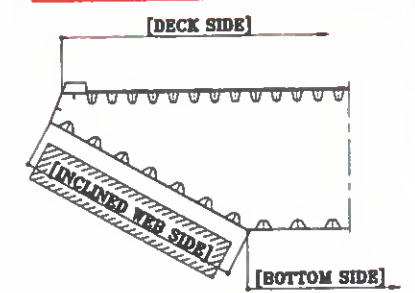
USC40



BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC40	<U-RIB CONN>	SET	ONE			
CBS201	PL 6*50	733	1	2	A709M Gr.345	
		S.TOTAL =	2			

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



- NOTES
1. MATERIALS SEE S.O.M. UNLESS NOTED
 2. SCALLOP IN 35 . Or 10 mm UNLESS NOTED
 3. ALL FILLET WELD : 8 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-C (5)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

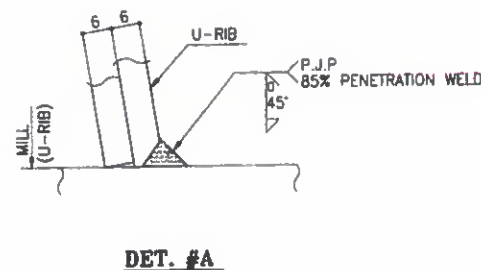
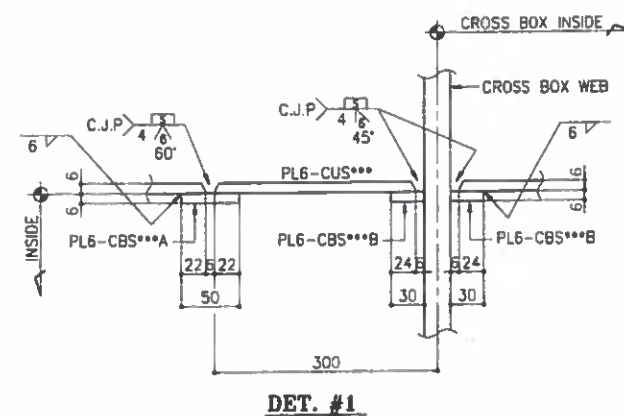
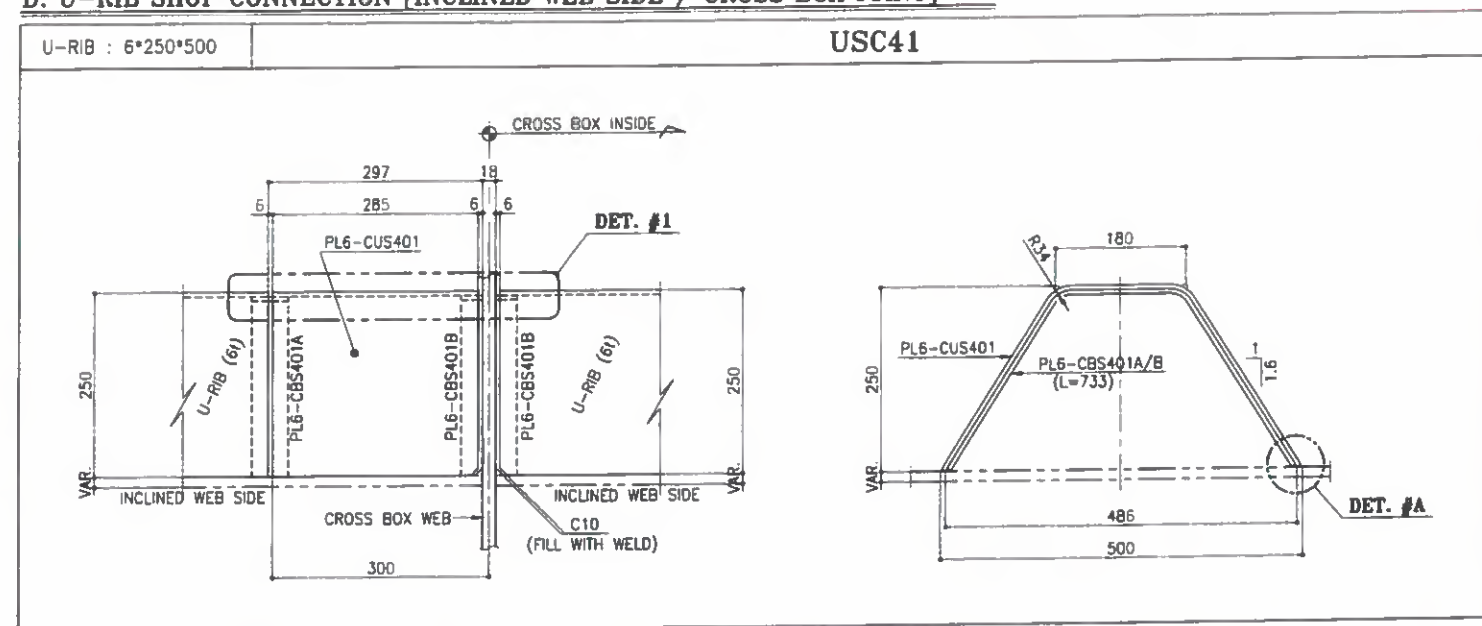
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-125
REV.
A

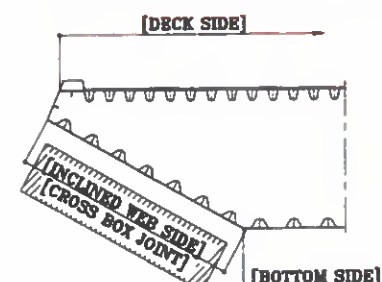
U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

D. U-RIB SHOP CONNECTION [INCLINED WEB SIDE / CROSS BOX JOINT]



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC41	<U-RIB CONN>	SET	ONE			
CUS401	PL 6*756	285	1	10	A709M	Gr.345
CBS401A	PL 6*50	733	1	2	A709M	Gr.345
CBS401B	PL 6*30	733	2	2	A709M	Gr.345
		S.TOTAL=		14		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.N. UNLESS NOTED
2. SCALLOP R= 35, C= 10 UNLESS NOTED
3. ALL FILLET WELD:  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

[illegible]

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SHOP CONNECTION DETAIL-D (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KIM
DATE ISSUED				
2016.02.25	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



Combined Group
Contracting Company

DRAWING NO.

RA140-22-BRG-SD-STD-131

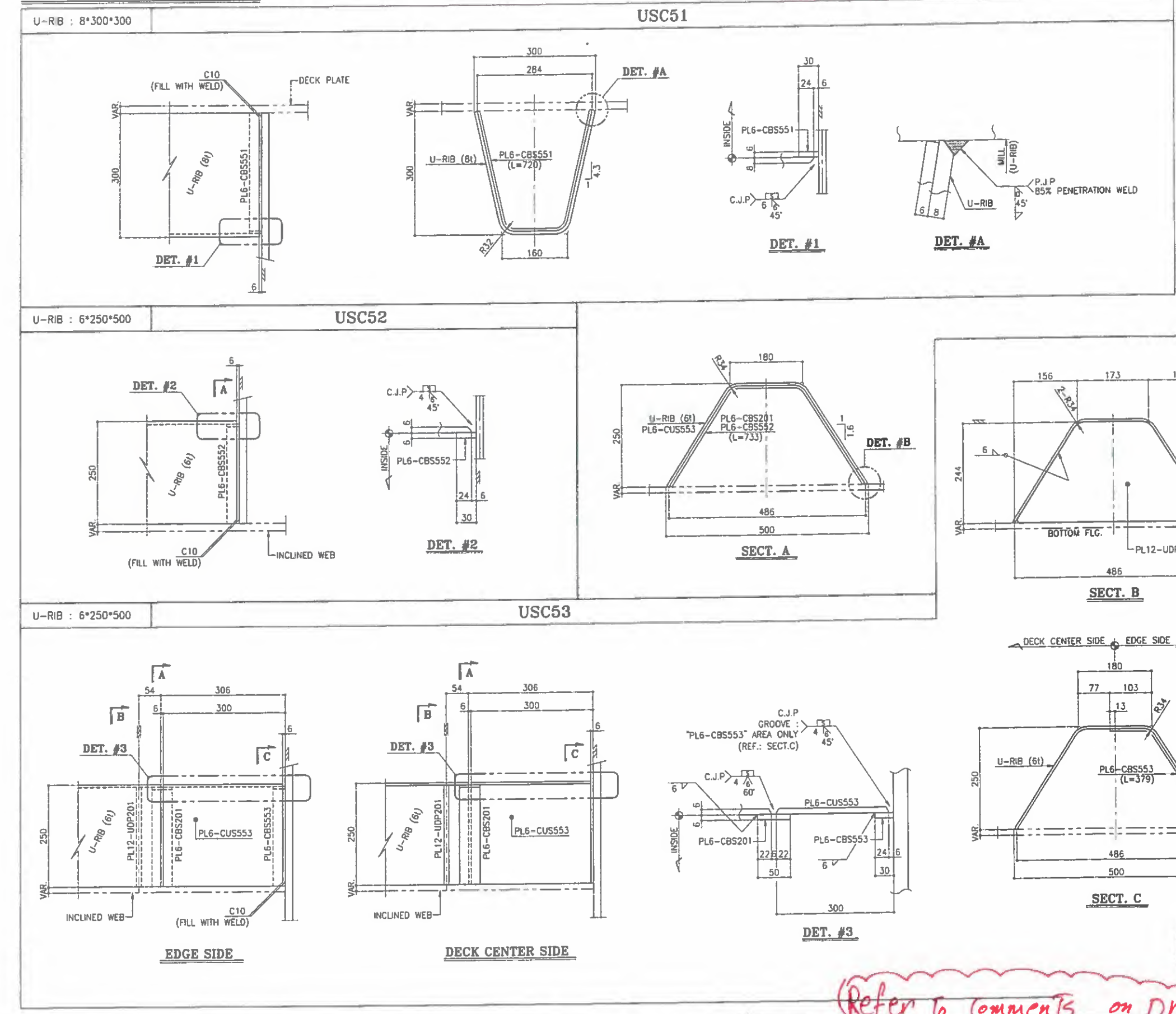
REV

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

Refer To Comments on Draw. # SD-STD-101 & 001

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC51	<U-RIB CONN.>		SET ONE			
CBS551	PL 6*30	720	1	1 A709M	Gr.345	
	S.TOTAL=		1			
USC52	<U-RIB CONN.>		SET ONE			
CBS552	PL 6*30	733	1	1 A709M	Gr.345	
	S.TOTAL=		1			
USC53	<U-RIB CONN.>		SET ONE			
CUS553	PL 6*756	294	1	11 A709M	Gr.345	
CBS201	PL 6*50	733	1	2 A709M	Gr.345	
CBS553	PL 6*30	379	1	1 A709M	Gr.345	
UDP201	PL 12*244	486	1	11 A709M	Gr.345	
	S.TOTAL=		24			

HYUNDAI E&S CONCRETE GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. ROLLUP IN 35, 0 18 mm UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SON	S.M.KHON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPROV.
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SHOP CONNECTION DETAIL-ETC (1)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1 : 5	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S CONSTRUCTION					
Combined Group Contracting Company					
DRAWING NO.					REV.
RA140-22-BRG-SD-STD-141					A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To Comments on Draw.
SD-E-101

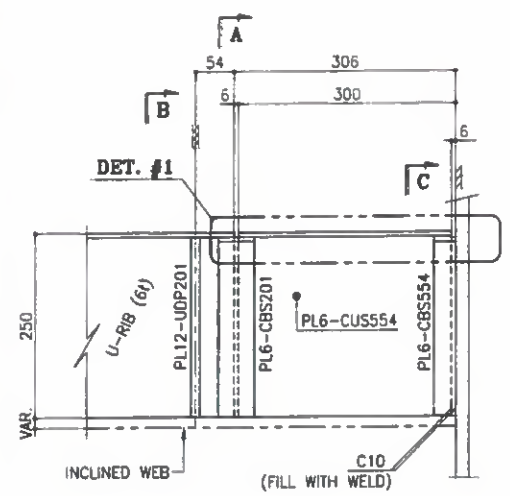
Refer to comments on Draw. # 3D-STD-1012.001

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

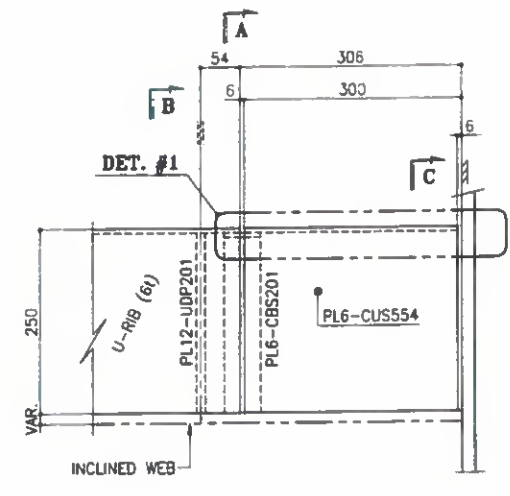
ETC. U-RIB SHOP CONNECTION

U-RIB : 6*250*500

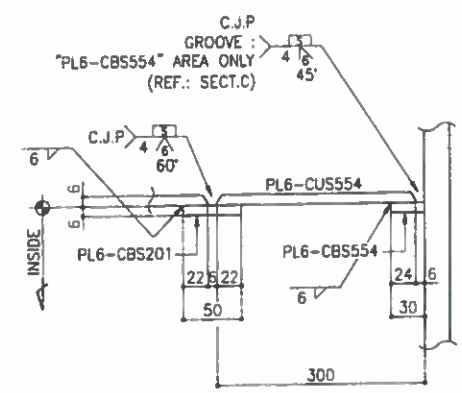
USC54



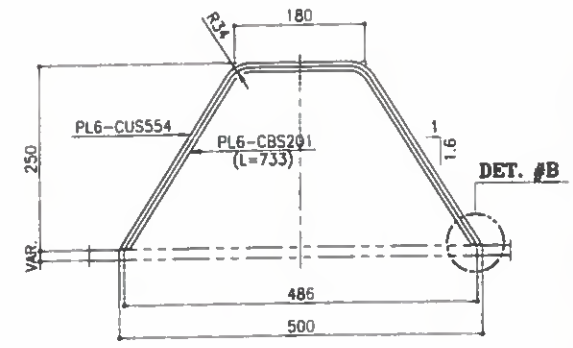
EDGE SIDE



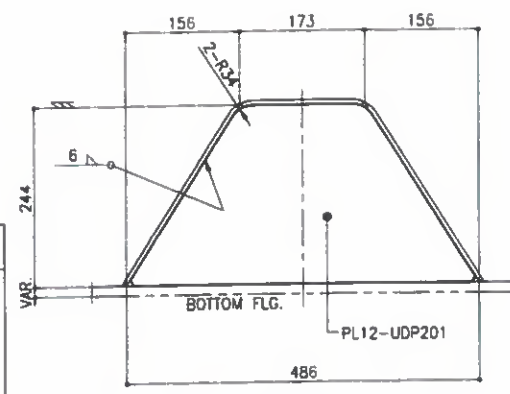
DECK CENTER SIDE



DET. #1



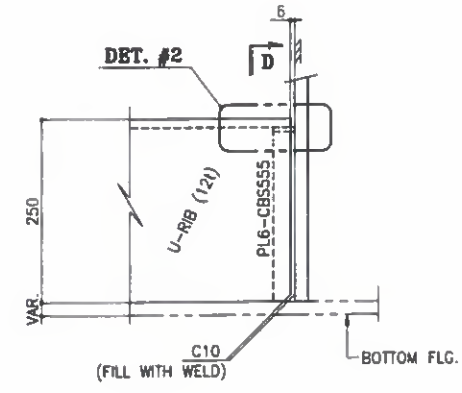
SECT. A



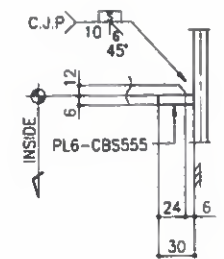
SECT. B

U-RIB : 12*250*500

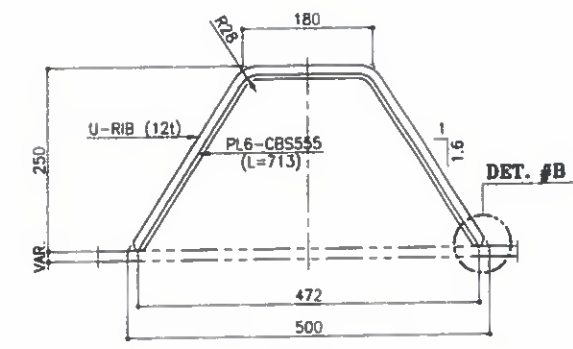
USC55



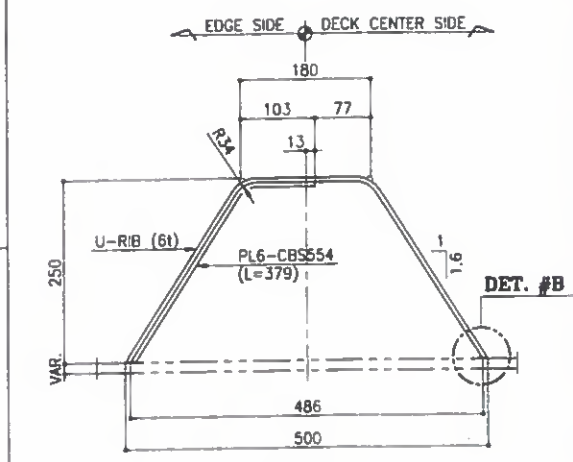
DET. #2



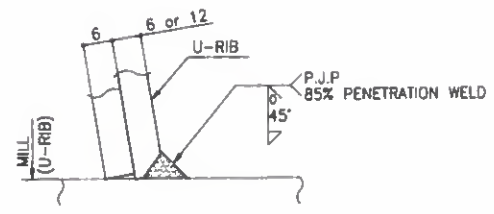
DET. #2



SECT. D



SECT. C



DET. #B

BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK
USC54	<U-RIB CONN>		SET	ONE	
CUS554	PL 6*756	294	1	11	A709M Gr.345
CBS201	PL 6*50	733	1	2	A709M Gr.345
CBS554	PL 6*30	379	1	1	A709M Gr.345
UDP201	PL 12*244	486	1	11	A709M Gr.345
				S.TOTAL =	24
USC55	<U-RIB CONN>		SET	ONE	
CBS555	PL 6*30	713	1	1	A709M Gr.345
				S.TOTAL =	1

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

- NOTES
1. MATERIALS SEE B.O.B. UNLESS NOTED
 2. ROLLUP R= 35, D= 10, UNLESS NOTED
 3. ALL FILLET WELD : 6 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-ETC (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

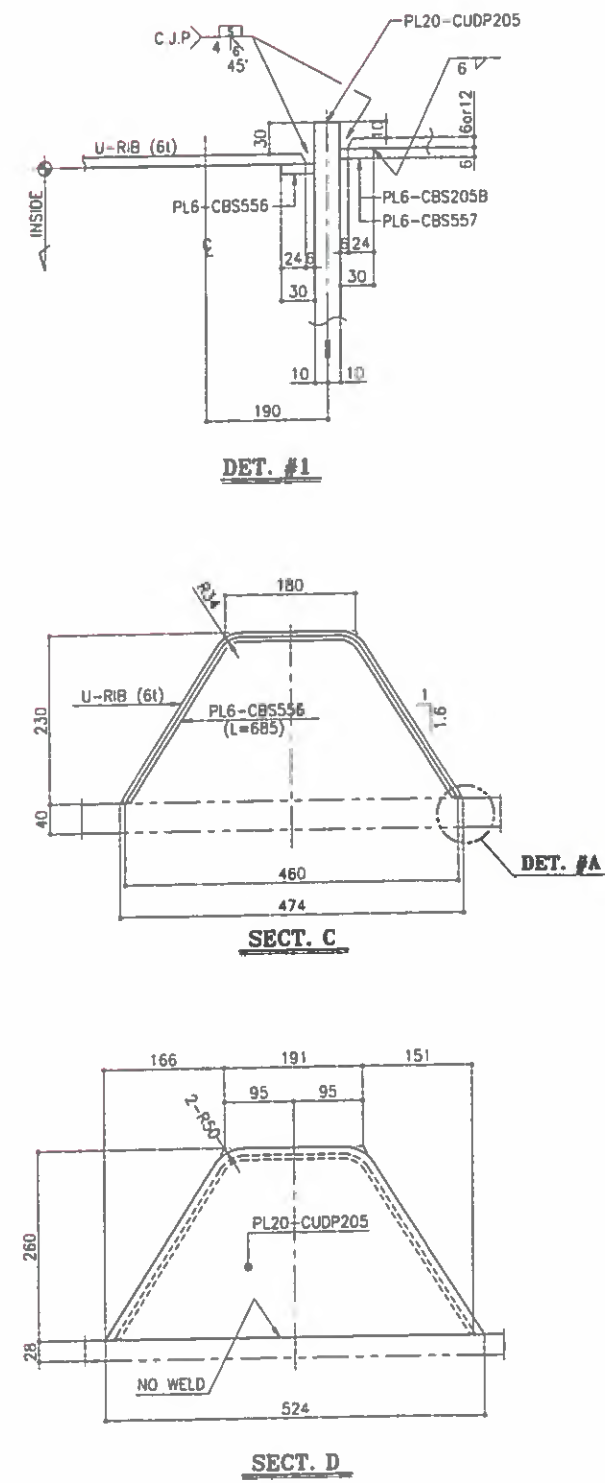
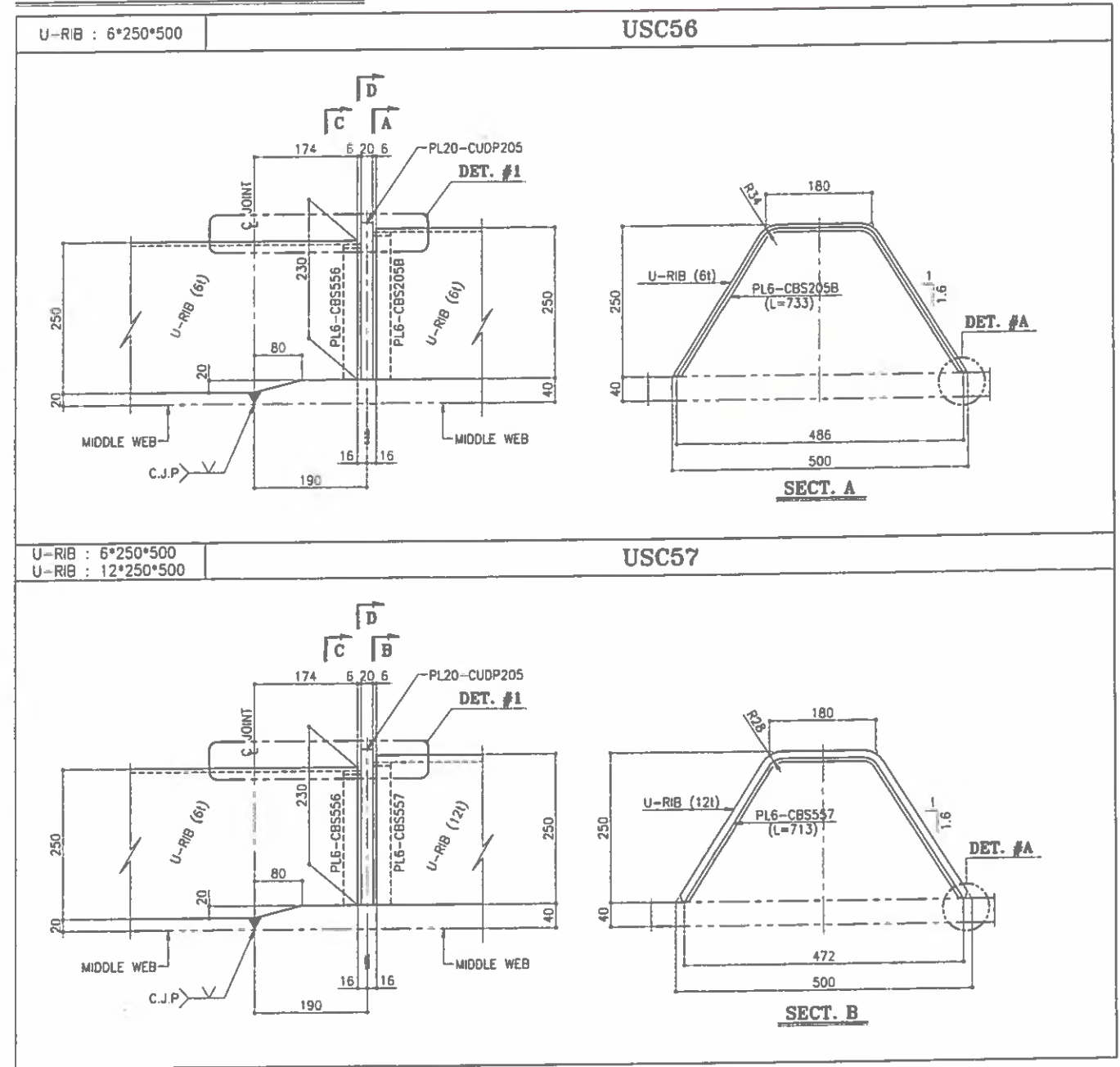
DRAWING NO.
RA140-22-BRG-SD-STD-142

REV.
A

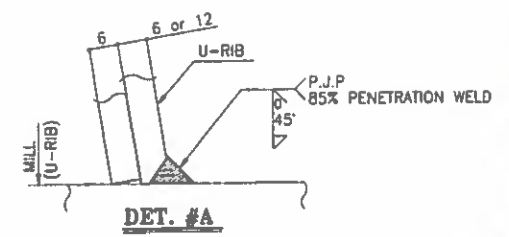
Refer To Comments on Draw. # SD-STD-1012 001

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
USC56	<U-RIB CONN>	SET	ONE			
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS556	PL 6*30	685	1	1	A709M Gr.345	
CBS205B	PL 6*30	733	1	1	A709M Gr.345	
S.TOTAL =				23		
USC57	<U-RIB CONN>	SET	ONE			
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS556	PL 6*30	685	1	1	A709M Gr.345	
CBS557	PL 6*30	713	1	1	A709M Gr.345	
S.TOTAL =				23		



HYUNDAI E&S
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE S.O.B. UNLESS NOTED
 2. SCALLOP R=25, O=10 UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-ETC (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Engineering & Construction

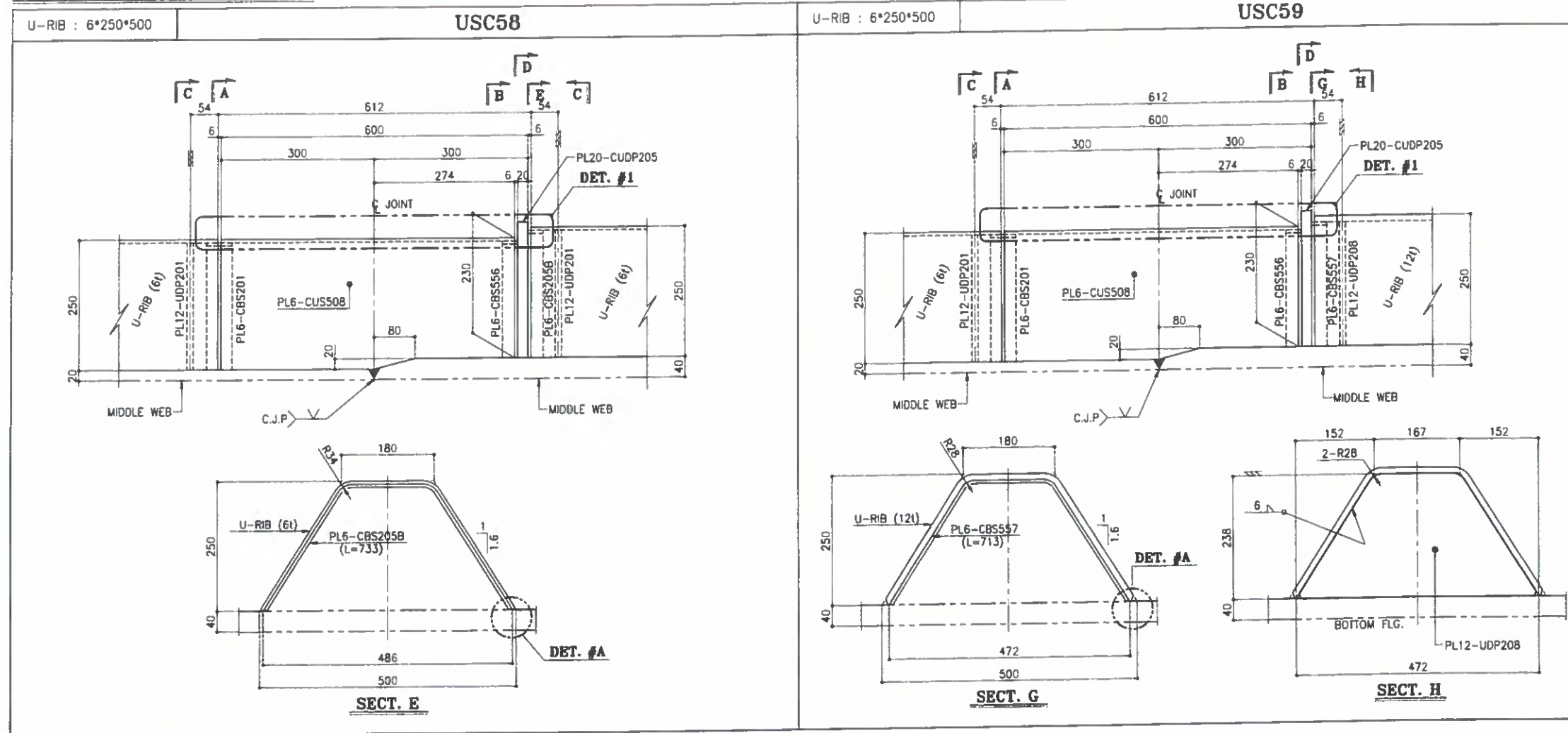
DRAWING NO.
RA140-22-BRG-SD-STD-143

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

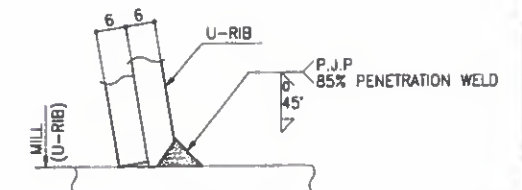
(Refer To comments on Draw. # SD-STD-1012001)

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC58	<U-RIB CONN.>	SET	ONE			
CUS508	PL 6*756	574	1	20	A709M Gr.345	
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS201	PL 6*50	733	1	2	A709M Gr.345	
CBS556	PL 6*30	685	1	1	A709M Gr.345	
CBS2058	PL 6*30	733	1	1	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
S.TOTAL=				68		
USC59	<U-RIB CONN.>	SET	ONE			
CUS508	PL 6*756	574	1	20	A709M Gr.345	
CUDP205	PL 20*260	524	1	21	A709M Gr.345	
CBS201	PL 6*50	733	1	2	A709M Gr.345	
CBS556	PL 6*30	685	1	1	A709M Gr.345	
CBS557	PL 6*30	713	1	1	A709M Gr.345	
UDP201	PL 12*244	486	1	11	A709M Gr.345	
UDP208	PL 12*238	472	1	11	A709M Gr.345	
S.TOTAL=				67		

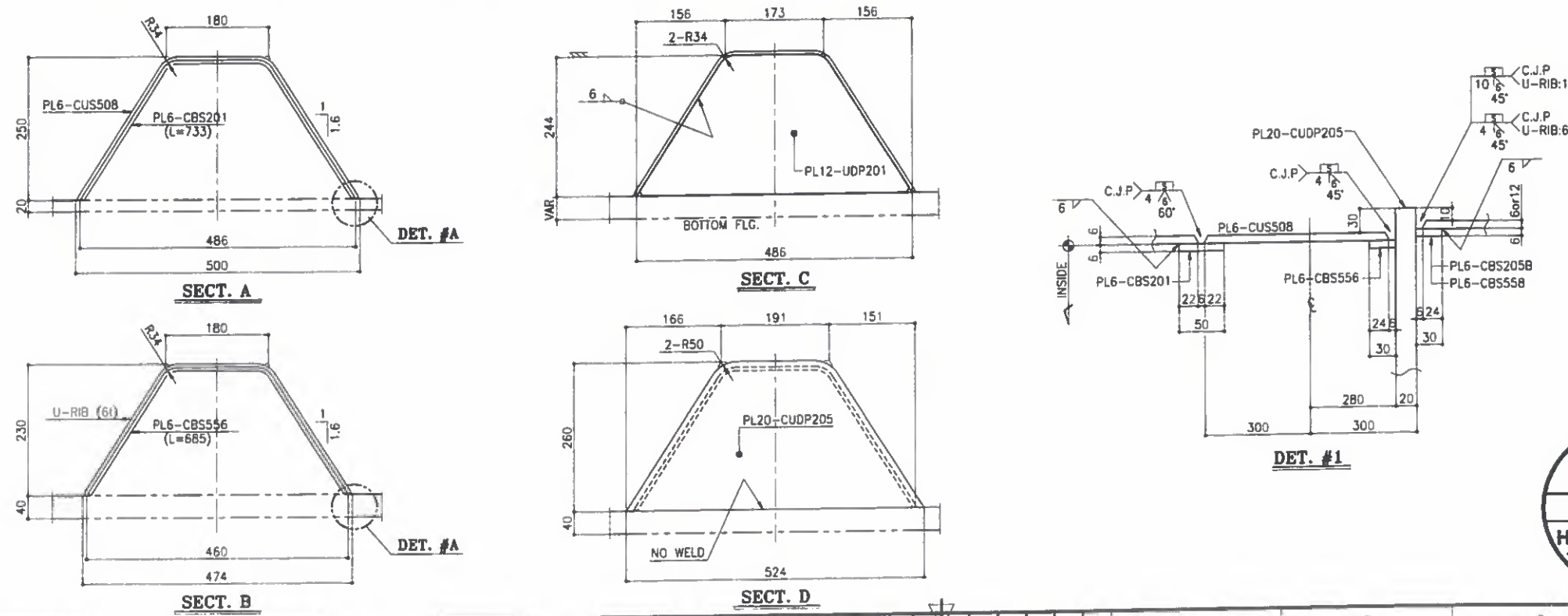


DET. #A



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=25, C=10 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{4}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE



A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SON	S.M.KHON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SHOP CONNECTION DETAIL-ETC (4)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1 : 5	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOUNGCHON					
DRAWING NO.					
RA140-22-BRG-SD-STD-144					
REV.					
A					

RA140-22-BRG-SD-STD-145 A

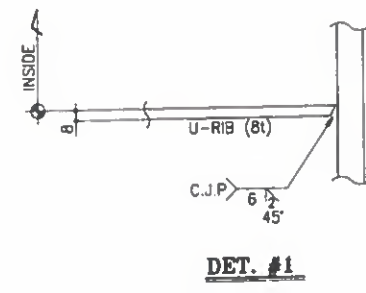
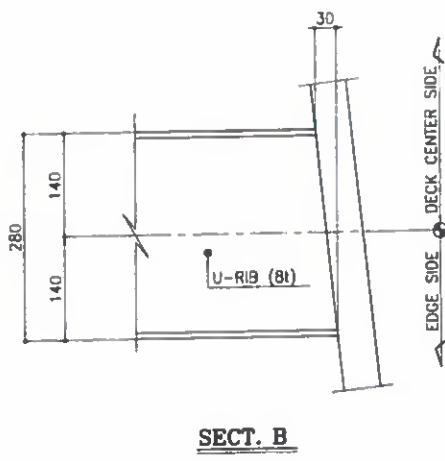
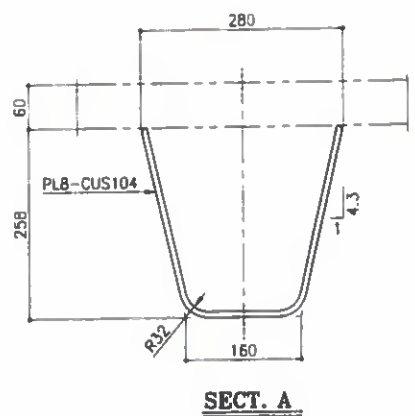
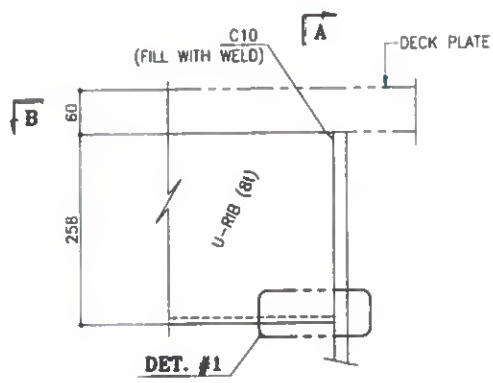
(Refer To Comments on Draw. SD-STD-102001)

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION

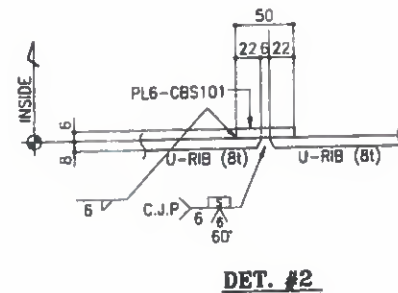
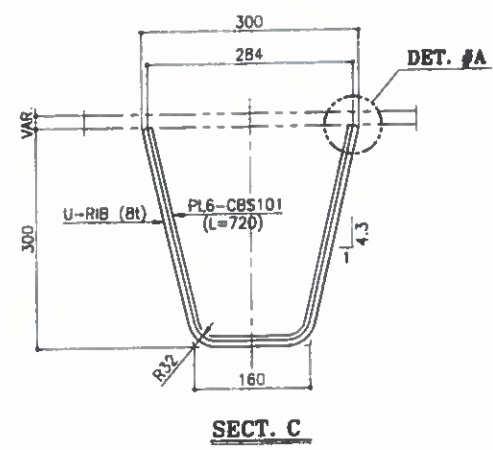
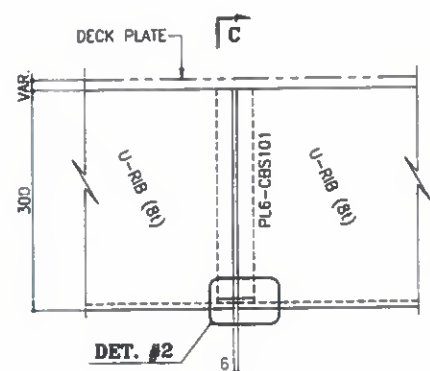
U-RIB : 8*258*280

USC66



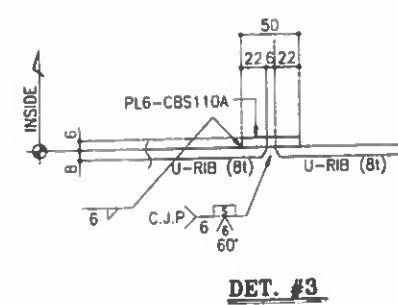
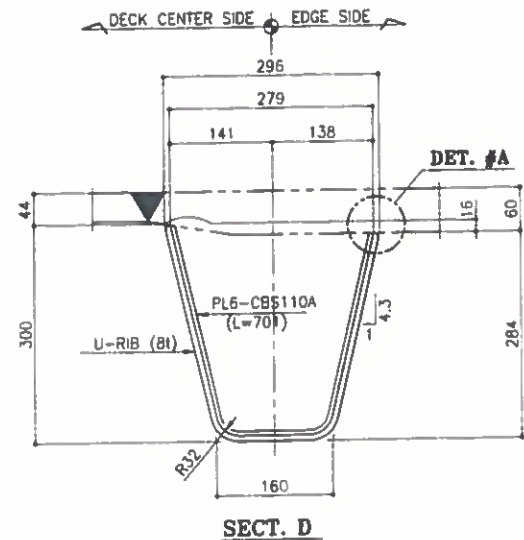
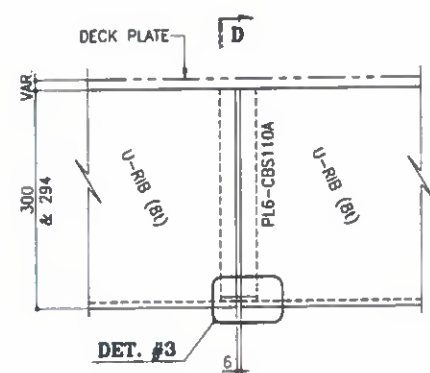
U-RIB : 8*300*300

USC67



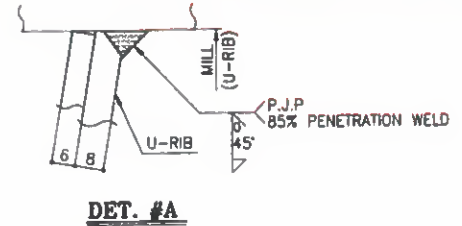
U-RIB : 8*300*296

USC68



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC67	<U-RIB CONN>	SET	ONE			
CBS101	PL 6*50	720	1	2	A709M Gr.345	
			S.TOTAL =	2		
USC68	<U-RIB CONN>	SET	ONE			
CBS110A	PL 6*50	701	1	2	A709M Gr.345	
			S.TOTAL =	2		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



- NOTES
1. MATERIALS SEE S.O.M. UNLESS NOTED
 2. SCALLOP R=35, O=10 UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-ETC (7)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SONW	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

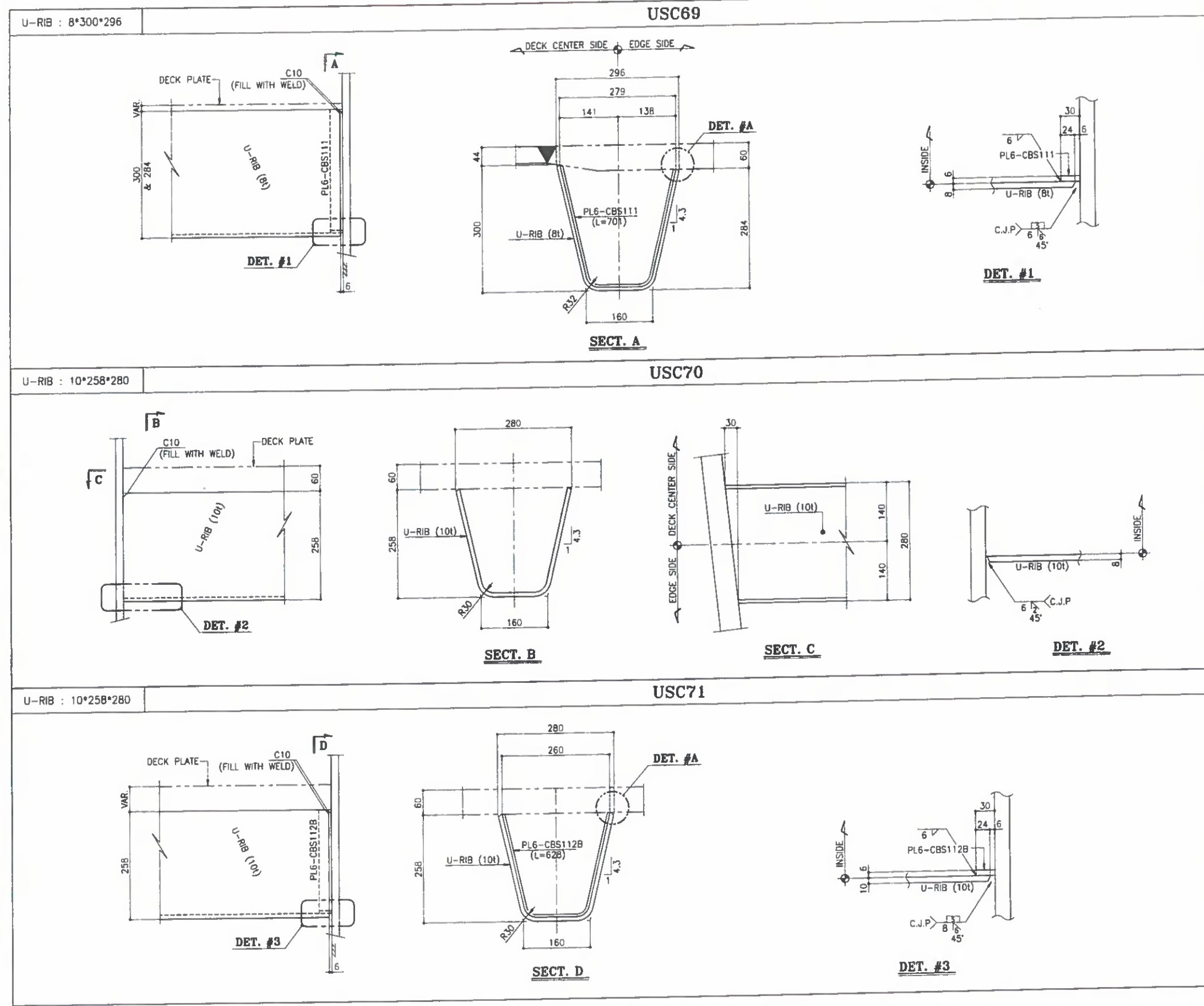
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-147
REV.
A

Refer to comments on DWG. SD-SID-1018001

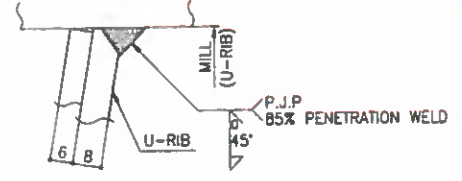
U-RIB CONNECTION DETAIL [SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
USC69	<U-RIB CONN>	SET	ONE			
CBS111	PL 6*30	701	1	1	A709M Gr.345	
	S.TOTAL=		1			
USC71	<U-RIB CONN>	SET	ONE			
CBS112B	PL 6*30	628	1	1	A709M Gr.345	
	S.TOTAL=		1			

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE



- NOTES**
1. MATERIALS SEE S.O.B. UNLESS NOTED
 2. SCALLOP R= 25, C= 10 UNLESS NOTED
 3. ALL FILLET WELD : 6 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-ETC (8)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION **Combined Group**

DRAWING NO.
RA140-22-BRG-SD-STD-148

REV.
A

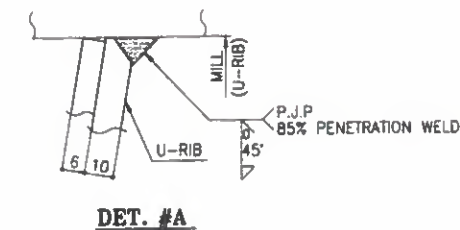
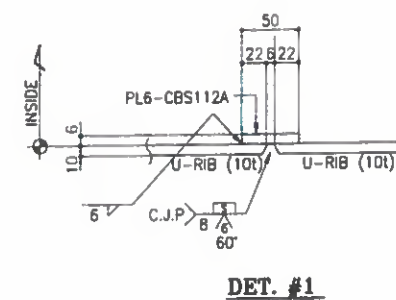
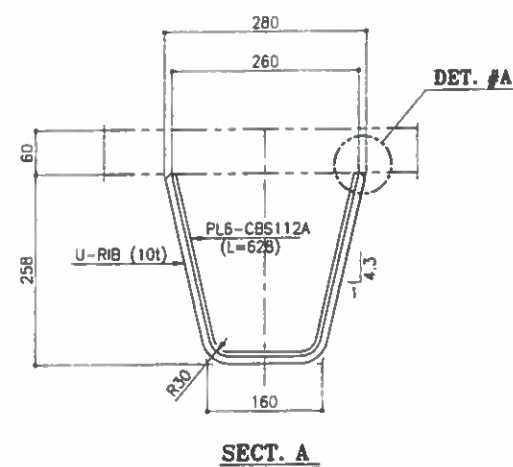
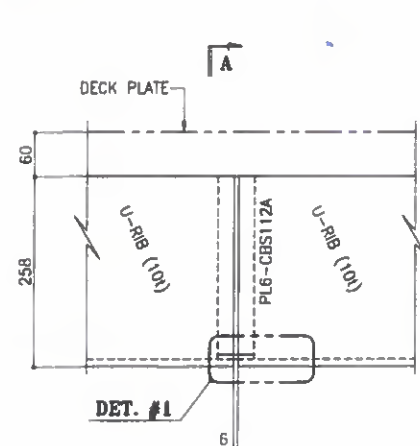
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

U-RIB CONNECTION DETAIL
[SHOP CONNECTION]

ETC. U-RIB SHOP CONNECTION

U-RIB : 10*258*280

USC72

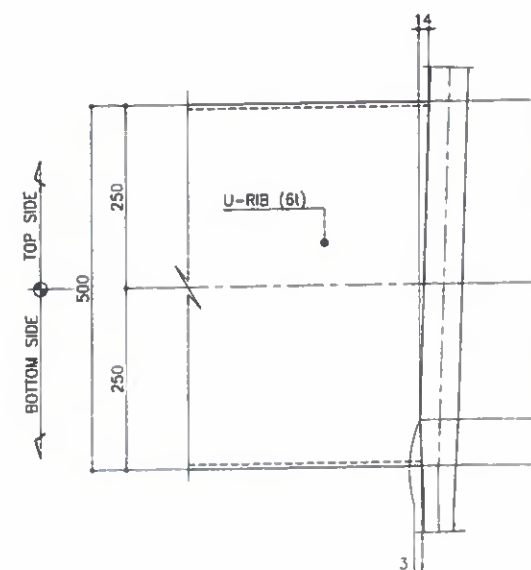
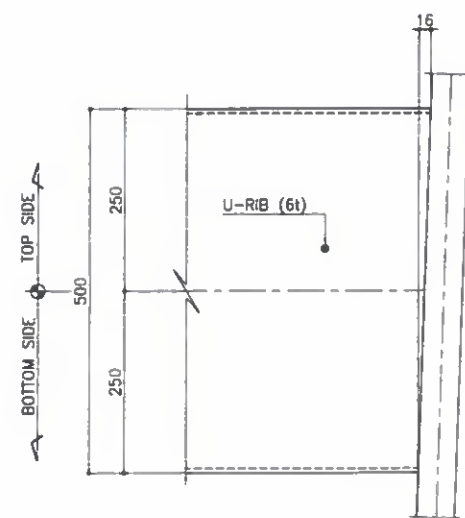
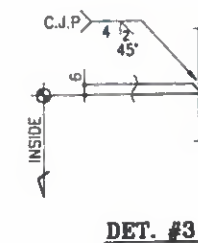
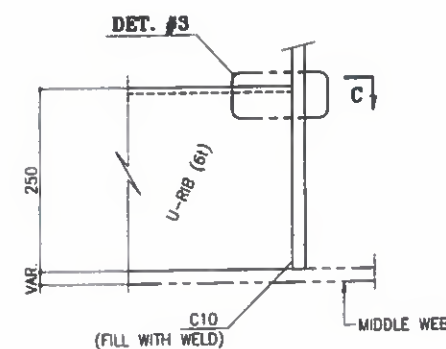
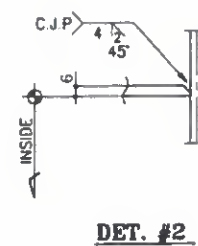
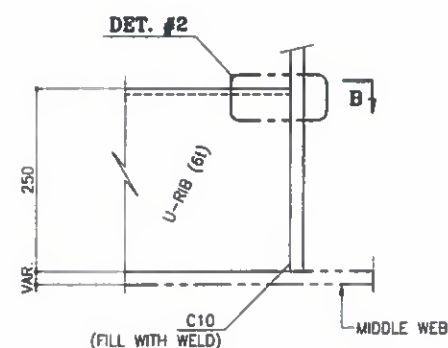


U-RIB : 6*250*500

USC73

U-RIB : 6*250*500

USC74

[illegible]

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , D= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2018.02.25	FOR APPROVAL	H.I.PARK	S.S. Song	S.MUKHERJEE		
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.		

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-ETC (9)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5				
DATE ISSUED	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAFTING NO.

RA140-22-BRG-SD-STD-149

EV.

A1

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

Refer To comments on Draw. No. SD-STD-141
on Package No. RA140-32-BRG-CW-DW-92120-A1
2 No. RA140-32-BRG-CW-DW-92130-A1

HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*



I-RIB SHOP CONNECTION (DECK & EDGE SIDE)			
I-RIB : 14*150 ISC01		I-RIB : 14*150 ISC04	
I-RIB : 14*150 ISC02		I-RIB : 14*150 ISC05	
I-RIB : 14*150 ISC03		I-RIB : 15*150 ISC06	

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

EMPLOYER _____

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SHOP CONNECTION DETAIL-E (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

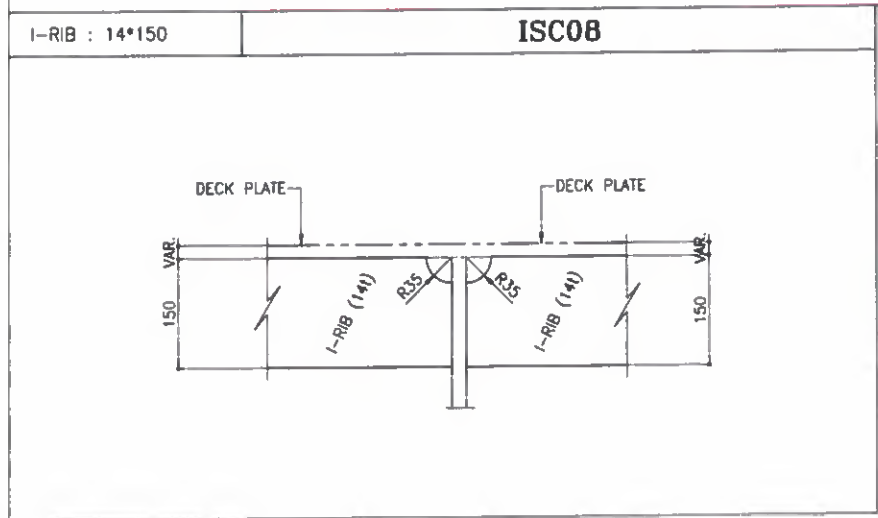
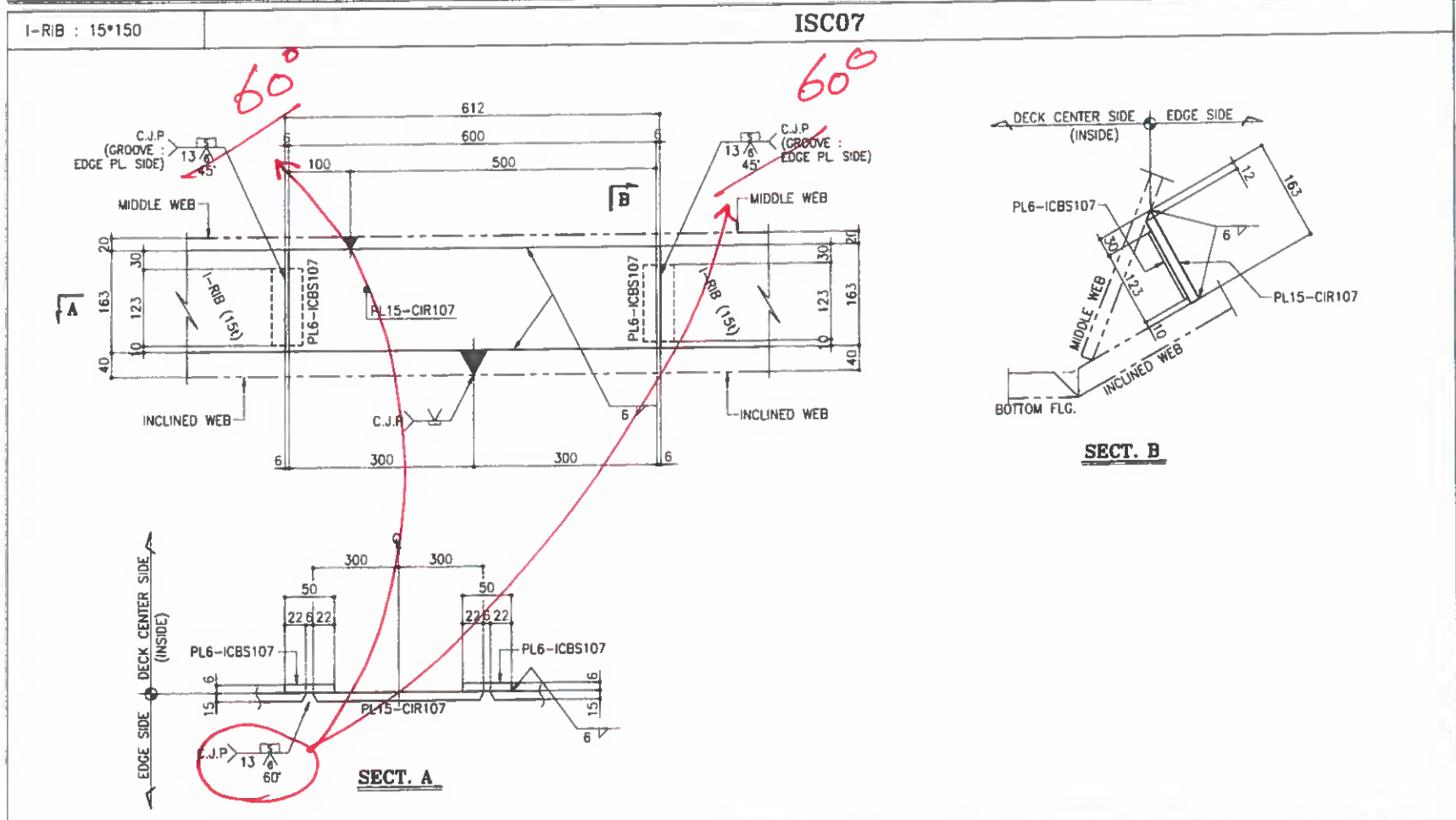
CONTRACTOR	
------------	--

DRAWING NO.	REV.
RA140-22-BRG-SD-STD-181	A

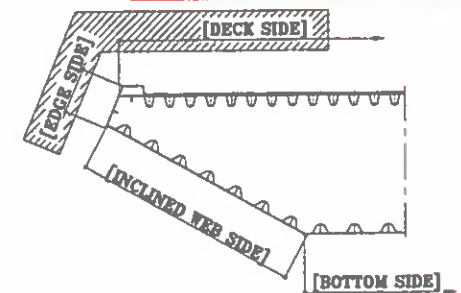
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

I-RIB CONNECTION DETAIL [SHOP CONNECTION]

E. I-RIB SHOP CONNECTION [DECK & EDGE SIDE]

[illegible]

FOR CONSTRUCTION
Date - 27/02/16 Signature M.J. LEE *M.J. Lee*



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , C= 10 UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

A	2018.02.25	FOR APPROVAL	WILSON, J.A.	S.S. SONG	S. LING
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-E (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAWING NO.

RA140-22-BRG-SD-STD-182

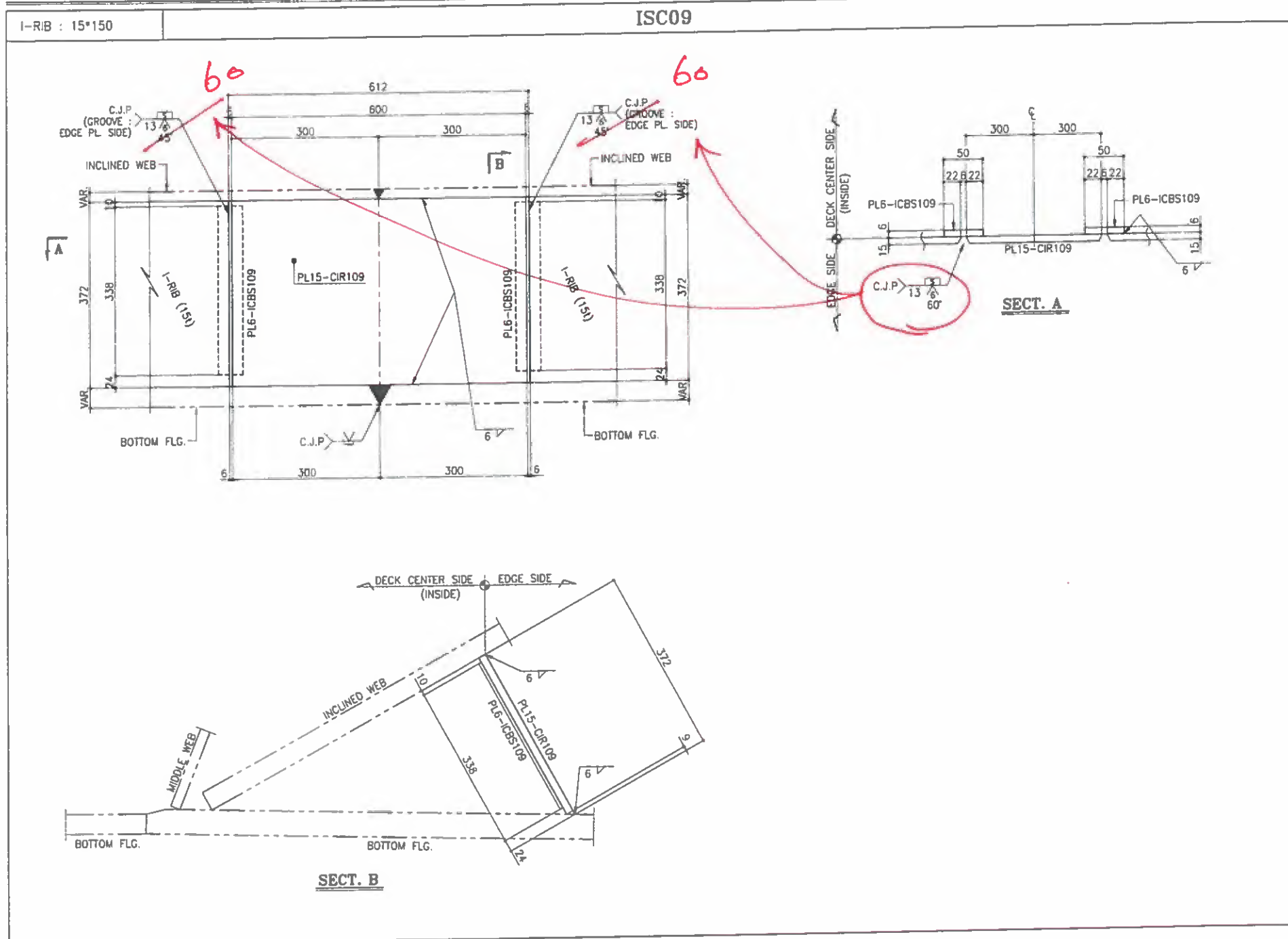
EV.

A

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

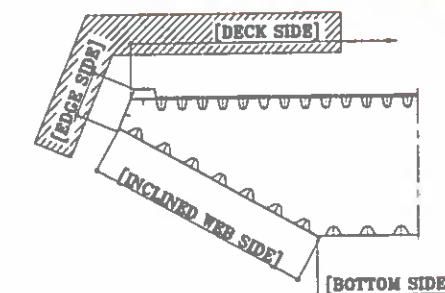
I-RIB CONNECTION DETAIL [SHOP CONNECTION]

E. I-RIB SHOP CONNECTION [DECK & EDGE SIDE]



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
ISC09	<I-RIB CONN.>	SET	ONE			
CIR109	PL 15*372	600	1	26	A709M Gr.345	
ICBS109	PL 6*50	338	2	2	A709M Gr.345	
	S.TOTAL			28		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=25, O=10 UNLESS NOTED
3. ALL FILLET WELD: 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-E (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
E&S I
YOULCHON

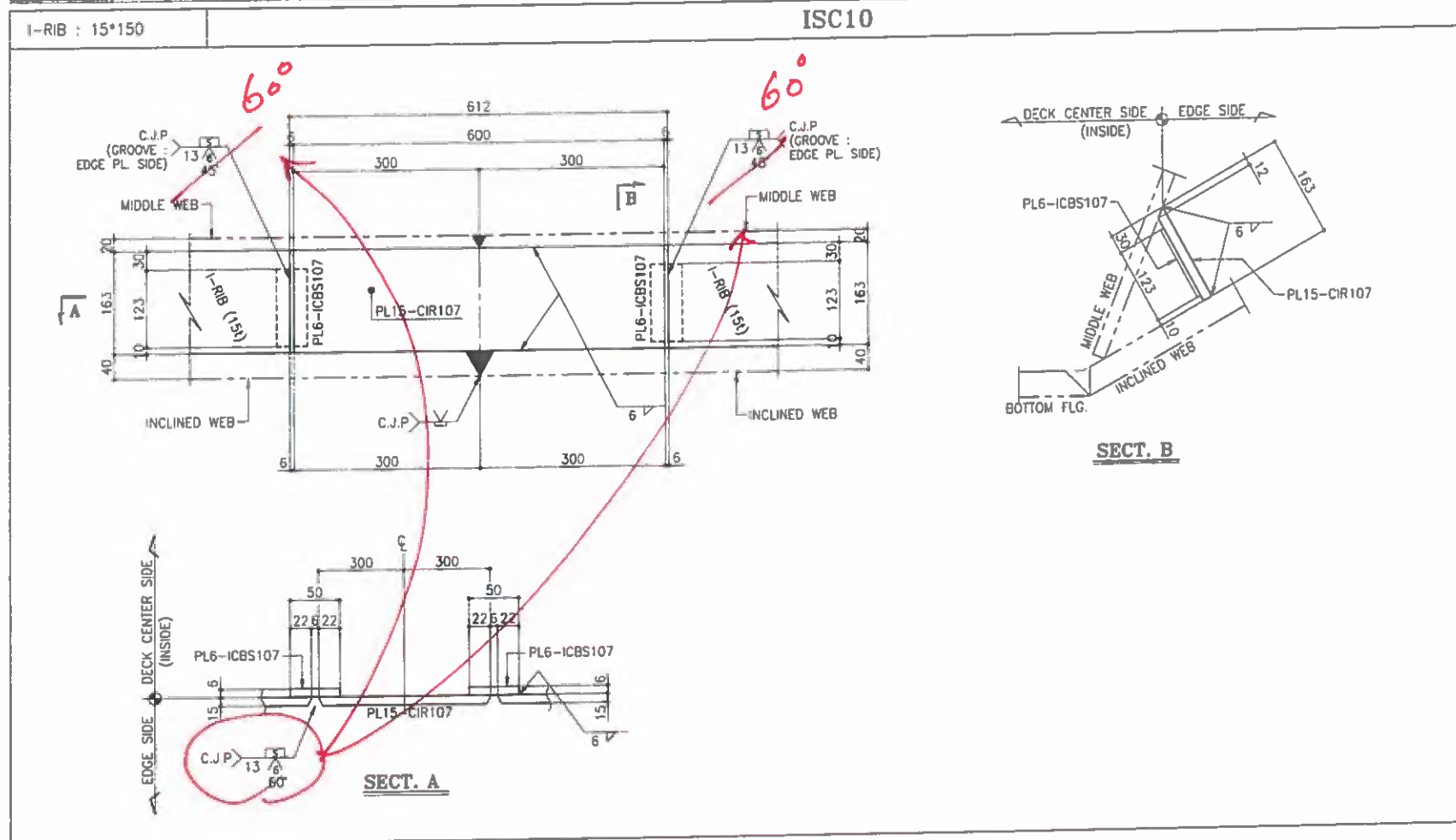
DRAWING NO.
RA140-22-BRG-SD-STD-183

FOR APPROVAL
2016.02.25
HYUNDAI E&S I
YOULCHON

I-RIB CONNECTION DETAIL

[SHOP CONNECTION]

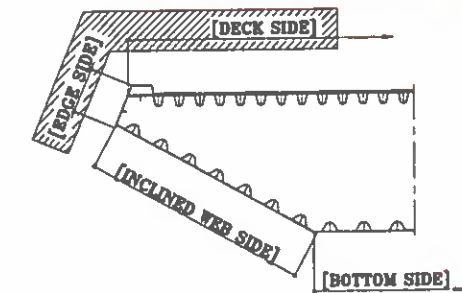
E. I-RIB SHOP CONNECTION [DECK & EDGE SIDE]



BILL OF MATERIALS

[illegible]

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*



KEY-PLAN

NOTES

1. MATERIALS SEE 9.0.1, UNLESS NOTED
2. SCALLOP R= 35, C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2016.02.25	FOR APPROVAL	KLPARK	S.S.SONG	SILVINO
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-E (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAWING NO.

RA140-22-BRG-SD-STD-184

EV

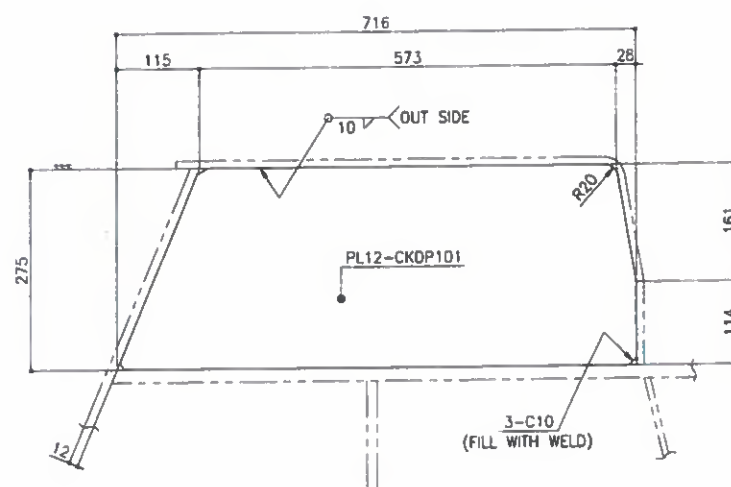
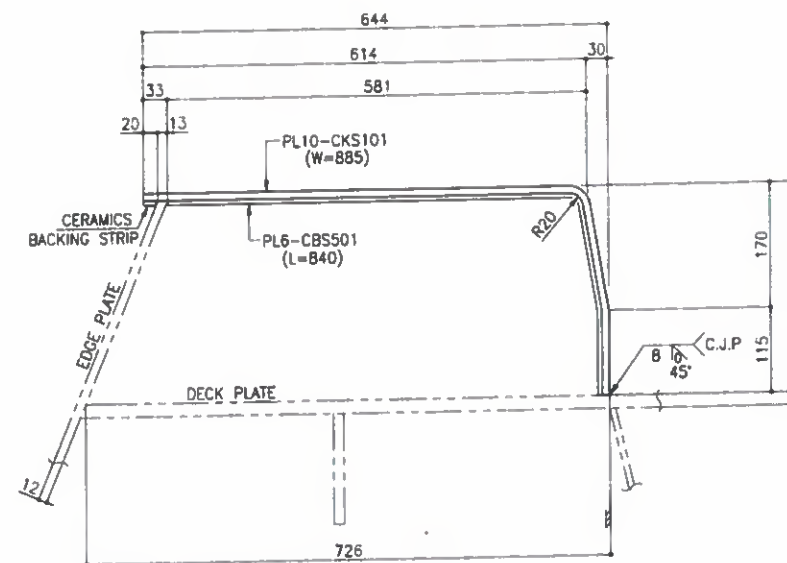
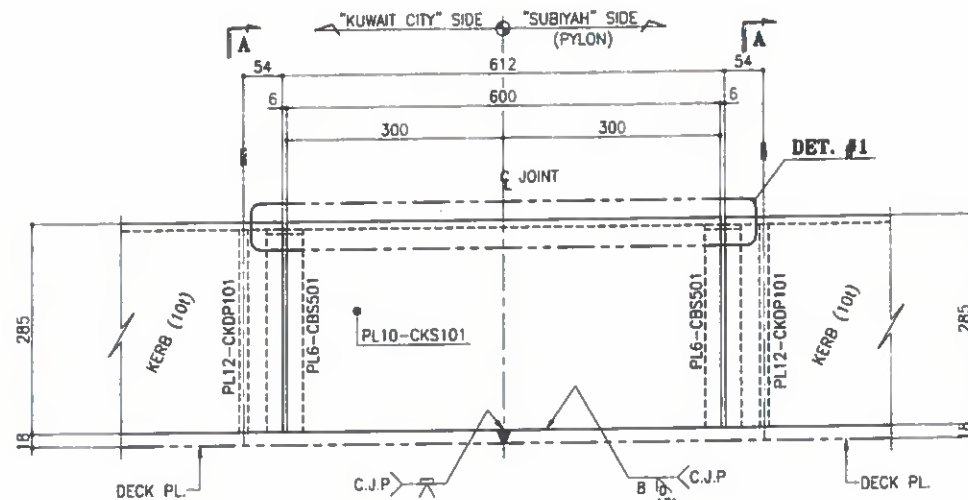
A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

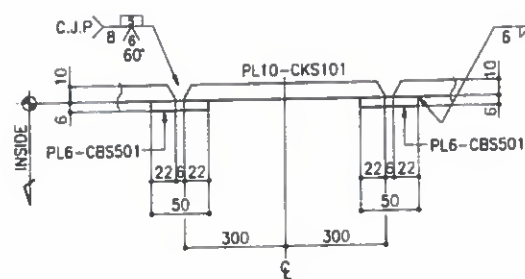
KERB CONNECTION DETAIL [SHOP CONNECTION]

F. KERB SHOP CONNECTION [KERB SIDE]

KSC01



SECT. A



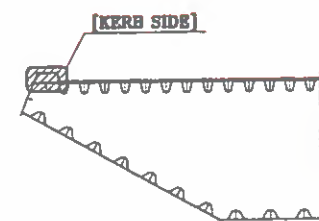
DET. #1

Provide approved reference for "KERB" from the approved detailing design drawing. Show plates thickness and add welding details.

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
KSC01	<KERB CONN>	SET	ONE			
CKS101	PL 10*885	600	1	42	A709M Gr.345	
CKDP101	PL 12*275	716	2	37	A709M Gr.345	
CBS501	PL 6*50	840	2	4	A709M Gr.345	
		S.TOTAL		83		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, 10 UNLESS NOTED
3. ALL FILLET WELD: 10 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-F (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.I.PARK	K.W.CHOI	S.S.SONH	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

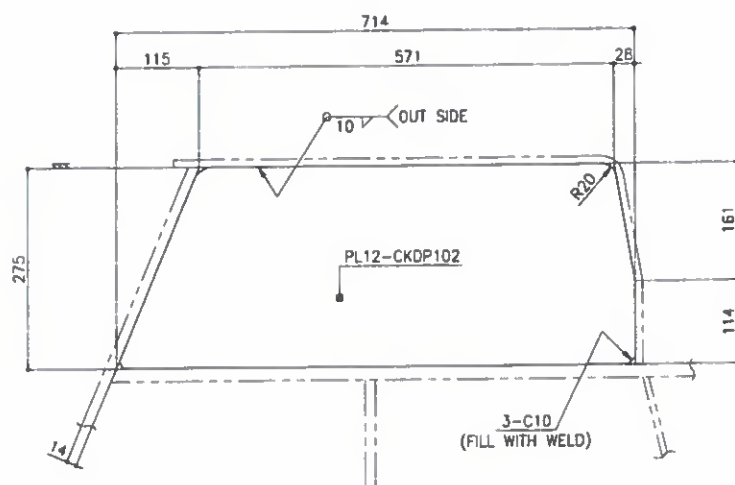
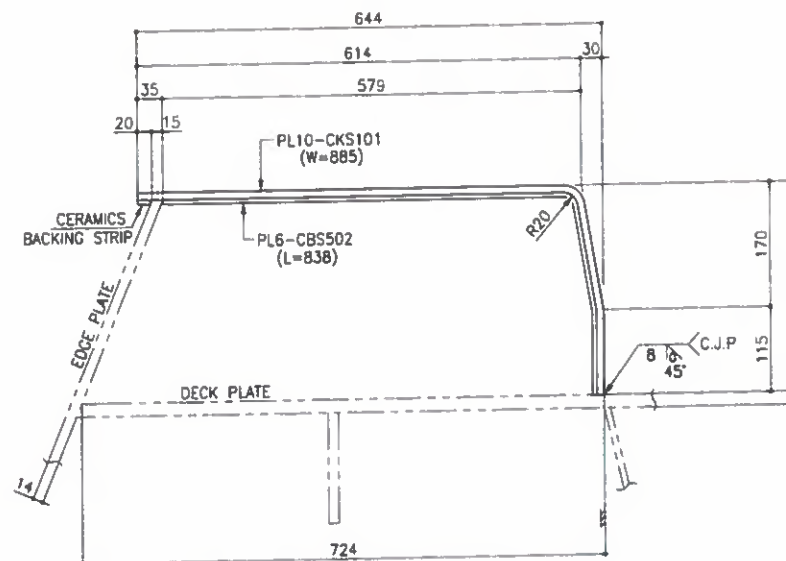
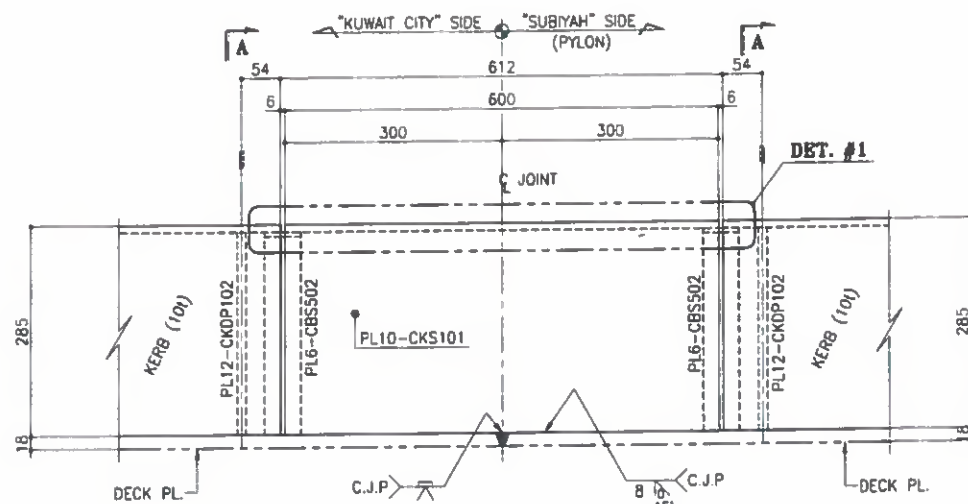
DRAWING NO.
RA140-22-BRG-SD-STD-191

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

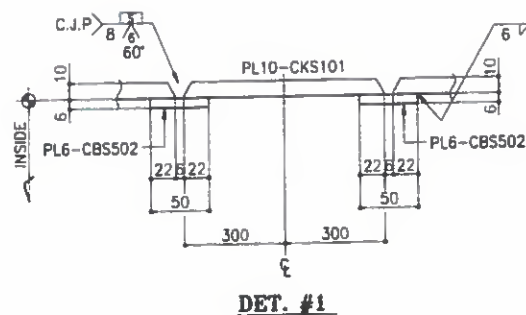
F. KERB SHOP CONNECTION [KERB SIDE]

KERB CONNECTION DETAIL [SHOP CONNECTION]

KSC02



SECT. A



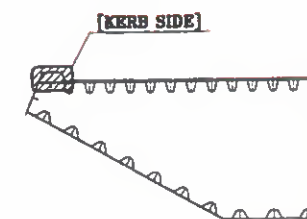
DET. #1

Refer To Comments on Drw. # SD-STD-191-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
KSC02	<KERB CONN>	SET	ONE			
CKS101	PL 10*885	600	1	42	A709M Gr.345	
CKDP102	PL 12*275	714	2	37	A709M Gr.345	
CBS502	PL 6*50	838	2	4	A709M Gr.345	
S.TOTAL =				83		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. ROLLUP IN 35, 0 10 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL

DATE DESCRIPTION OF REVISION DRAWN CHECK APPROV

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-F (2)

SCALE

1 : 5

DATE ISSUED

2016.02.25

CONTRACTOR

HYUNDAI ENGINEERING & CONSTRUCTION

Combined Group

DRAWING NO.

RA140-22-BRG-SD-STD-192

REV.

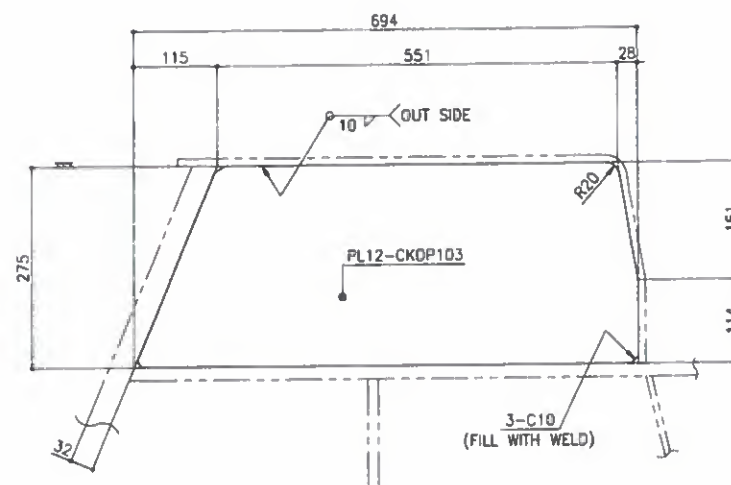
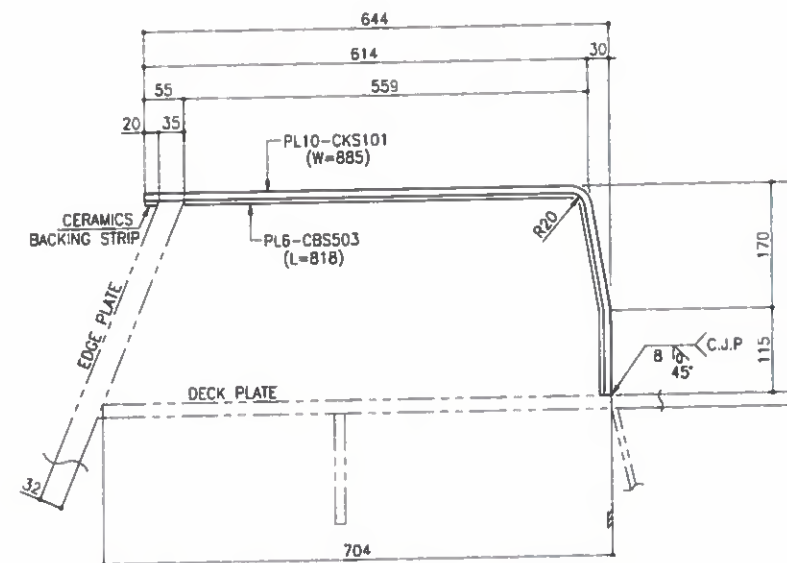
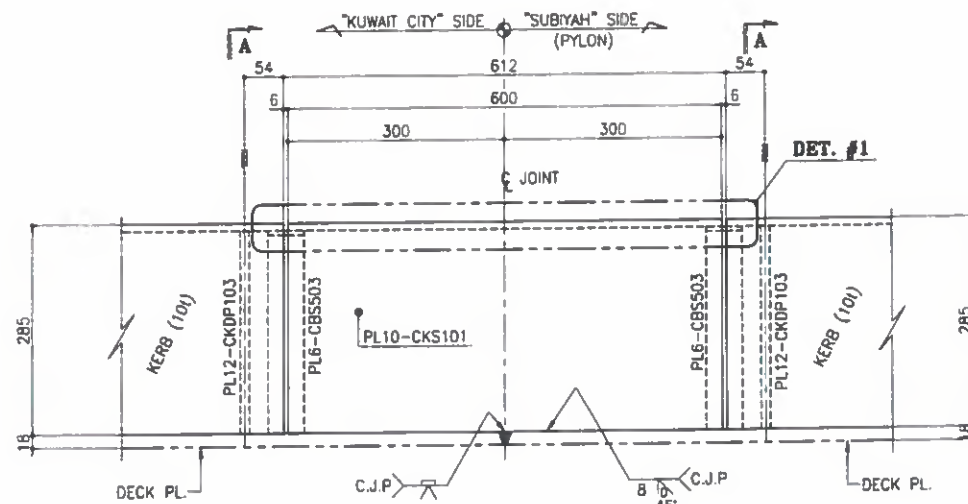
A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

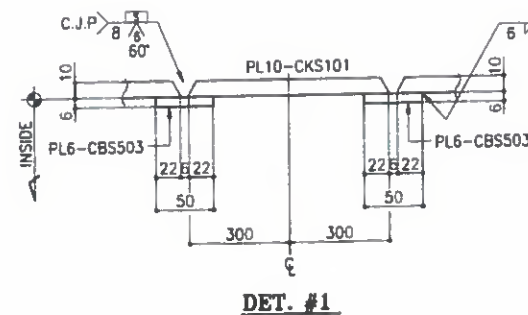
KERB CONNECTION DETAIL [SHOP CONNECTION]

F. KERB SHOP CONNECTION [KERB SIDE]

KSC03



SECT. A



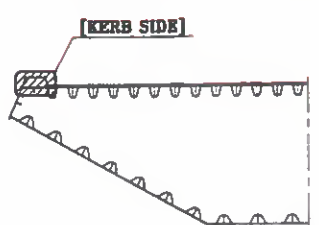
DET. #1

Refer To Comments on Draw. #SD-STD-191-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
KSC03	<KERB CONN>	SET	ONE			
CKS101	PL 10*885	600	1	42	A709M Gr.345	
CKDP103	PL 12*275	694	2	36	A709M Gr.345	
CBS503	PL 6*50	818	2	4	A709M Gr.345	
S.TOTAL=				81		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SLOPE 1:20, 1:30 UNLESS NOTED
3. ALL FILLET WELD: 8 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-F (3)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
**HYUNDAI E&S
YOULCHON**

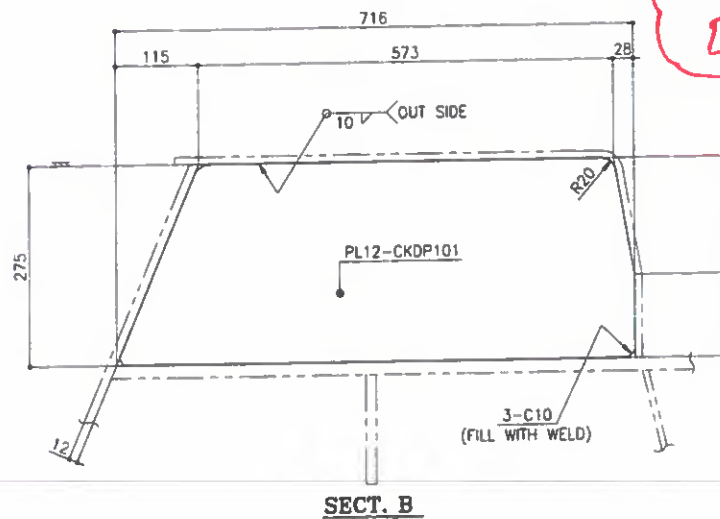
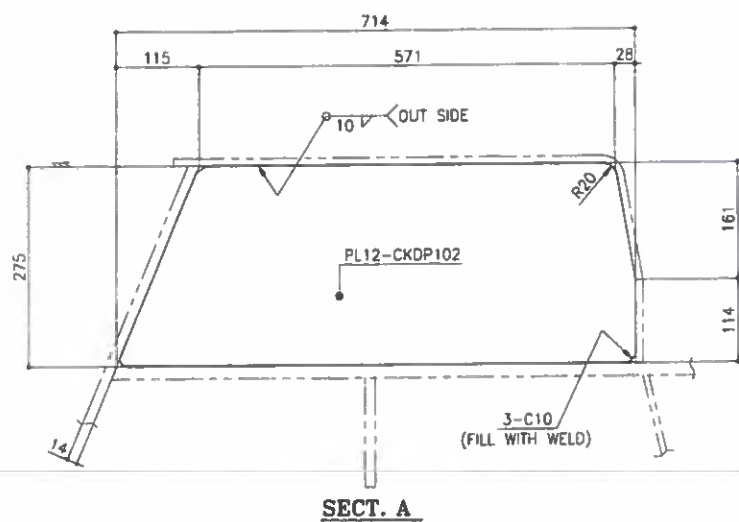
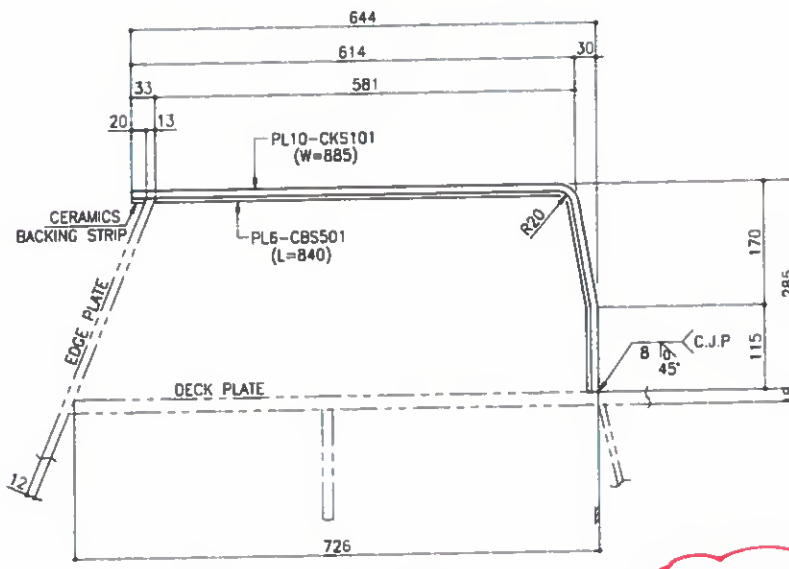
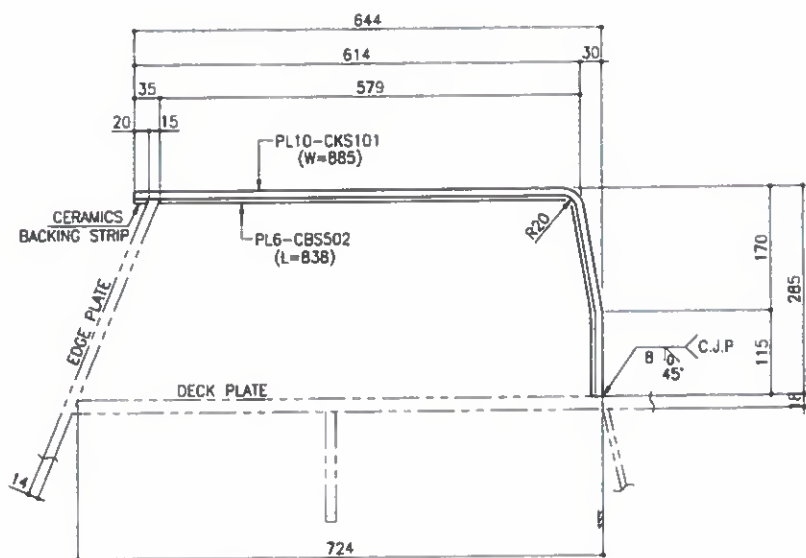
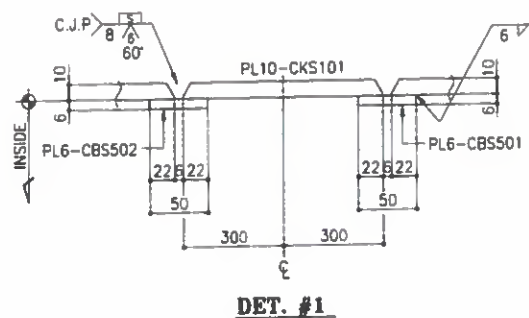
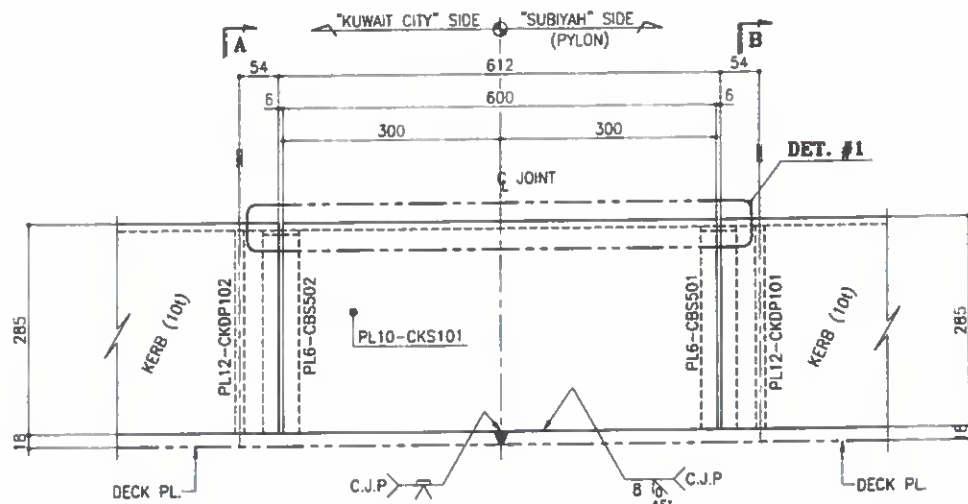
DRAWING NO.
RA140-22-BRG-SD-STD-193

FOR APPROVAL
2016.02.25
**HYUNDAI E&S
YOULCHON**

KERB CONNECTION DETAIL [SHOP CONNECTION]

F. KERB SHOP CONNECTION [KERB SIDE]

KSC04

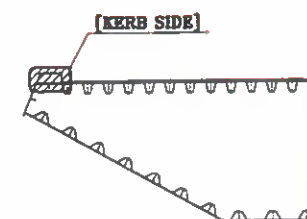


Refer To comments on
Dnw. # SD-STD-191-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH	QTY	WT(Kg)	REMARK	REV.
KSC04	<KERB CONN>	SET	ONE			
CKS101	PL 10*885	600	1	42	A709M Gr.345	
CKDP101	PL 12*275	716	1	19	A709M Gr.345	
CKDP102	PL 12*275	714	1	18	A709M Gr.345	
CBS501	PL 6*50	840	1	2	A709M Gr.345	
CBS502	PL 6*50	838	1	2	A709M Gr.345	
S.TOTAL				83		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE 9.0.11 UNLESS NOTED
2. SCALLOP R=35, O=10 UNLESS NOTED
3. ALL FILLET WELD: 10 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SHOP CONNECTION DETAIL-F (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

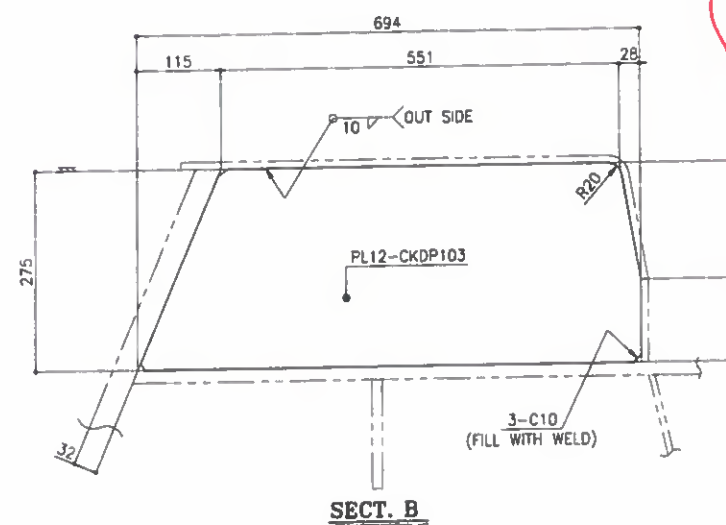
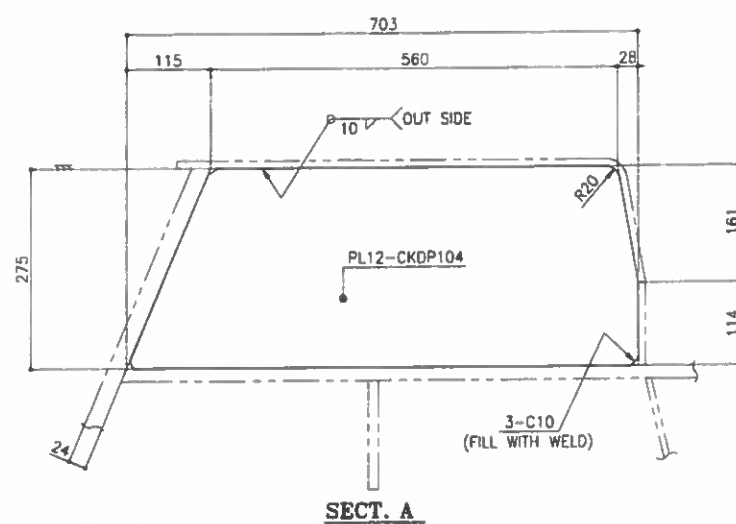
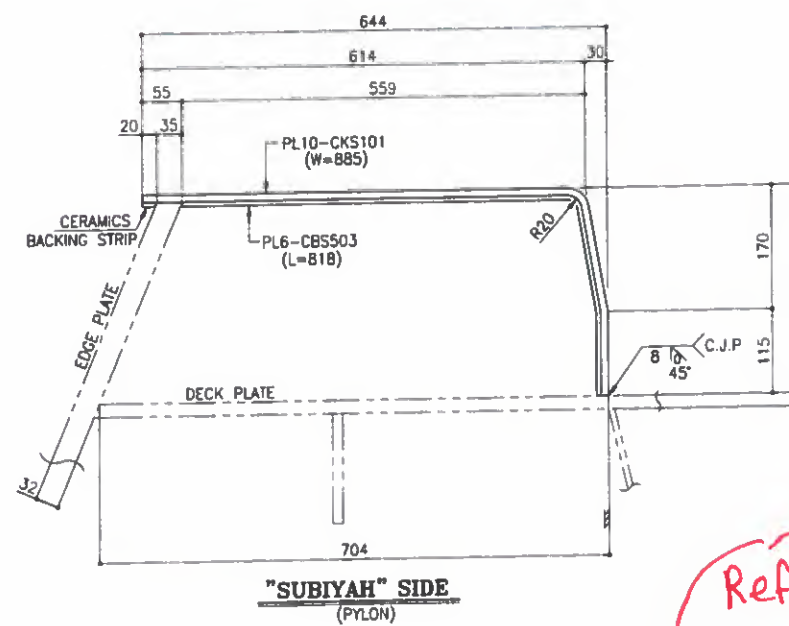
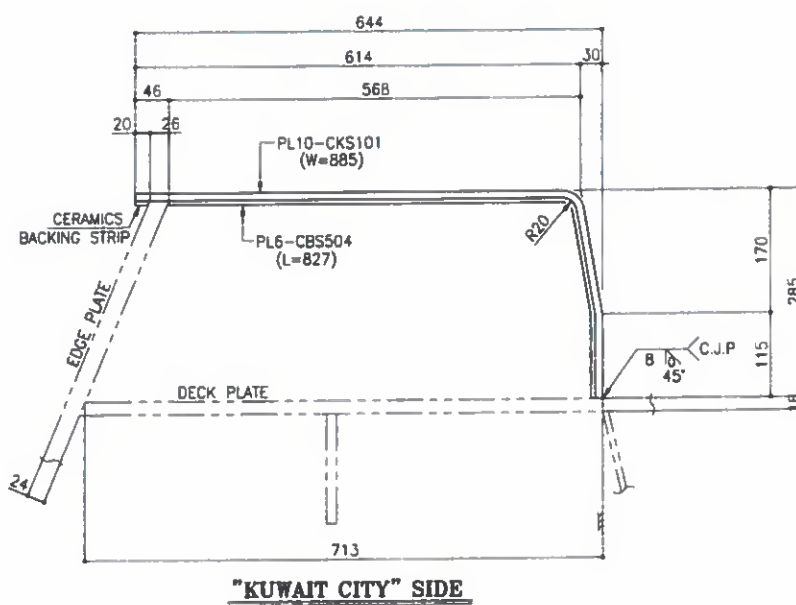
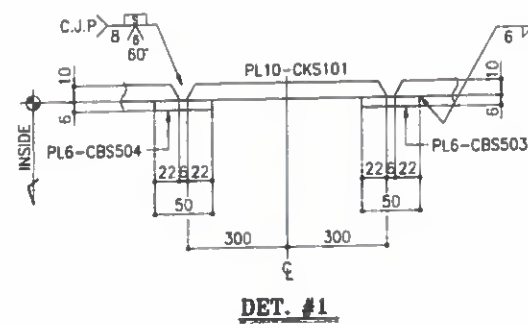
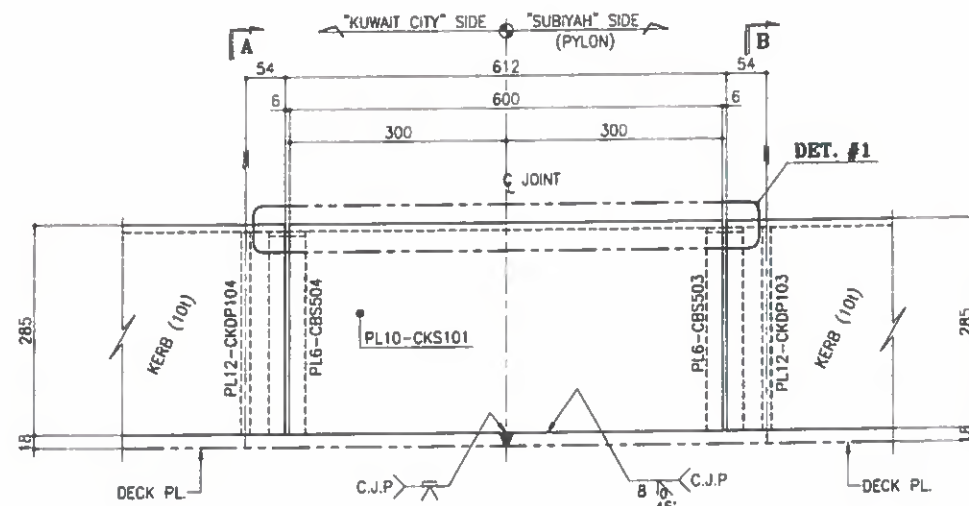
CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-194

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

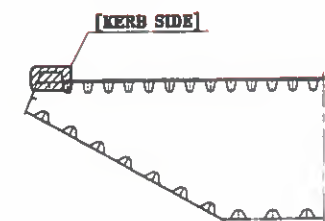
F. KERB SHOP CONNECTION [KERB SIDE]

KSC05



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
KSC05	<KERB CONN.>	SET	ONE			
CKS101	PL 10"885	600	1	42	A709M	Gr.345
CKDP103	PL 12"275	694	1	18	A709M	Gr.345
CKDP104	PL 12"275	703	1	18	A709M	Gr.345
CBS503	PL 6*50	818	1	2	A709M	Gr.345
CBS504	PL 6*50	827	1	2	A709M	Gr.345
			S.TOTAL =	82		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 36 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	2016.02.25	FOR APPROVAL	M. J. PARK	S. S. SONG	S. M. KIM
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SHOP CONNECTION DETAIL-F (5)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KIM
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25
CONTRACTOR				



DRAWING NO.

RA140-22-BRG-SD-STD-195

EV.

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

Refer To comments on
Draw. # SD-SD-194

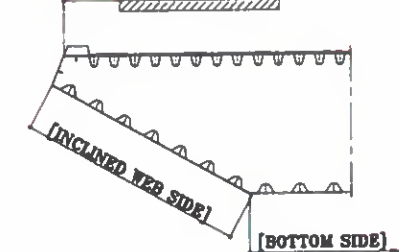
U-RIB CONNECTION DETAIL [FIELD CONNECTION]

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
UFC01	<U-RIB CONN>	SET	ONE			
UFSP101	PL 10*160	590	4	30	A709M Gr.345	
UDP101	PL 12*284	292	2	16	A709M Gr.345	
ECP101	PL 8*130	280	1	2	A709M Gr.345	
3k	H.T.B M22-2N+2W	90	24		A325M Type1	
S.TOTAL=				48		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

[DECK SIDE]



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, R=10 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO
1	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONG	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
FIELD CONNECTION DETAIL-A (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

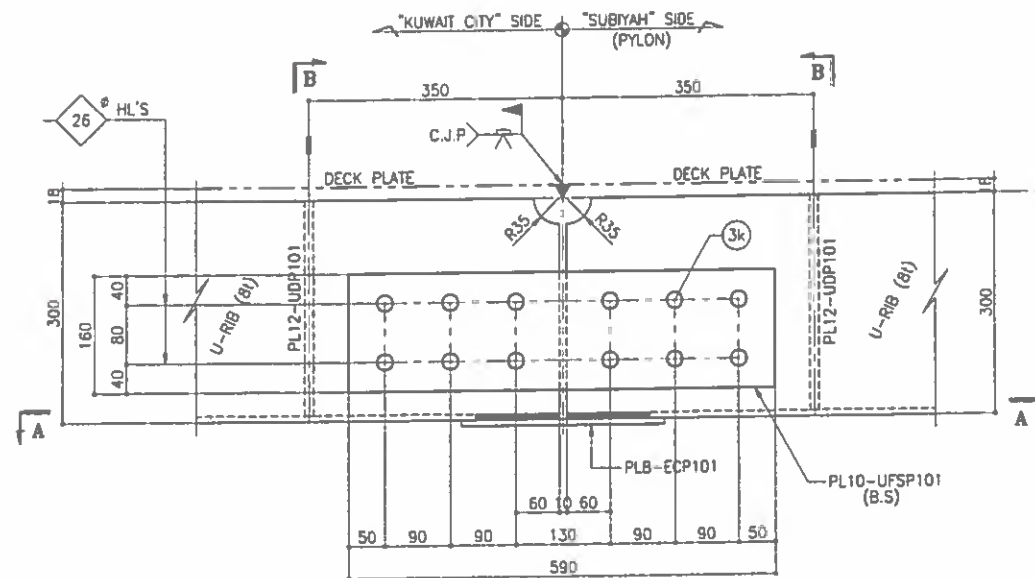
DRAWING NO.
RA140-22-BRG-SD-STD-201

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

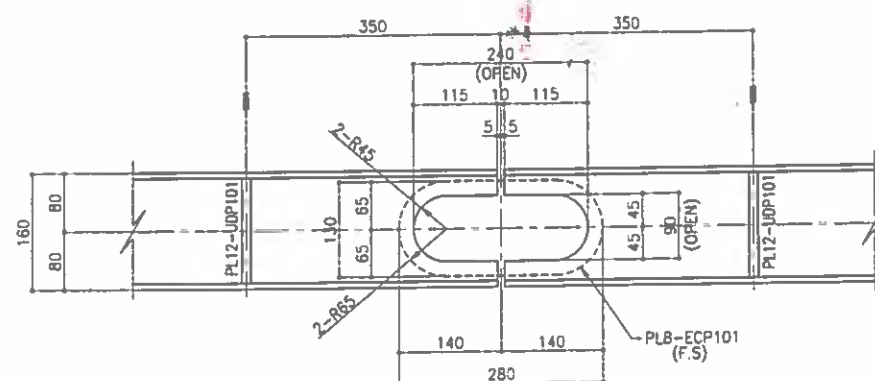
A. U-RIB FIELD CONNECTION [DECK SIDE]

U-RIB : 8*300*300

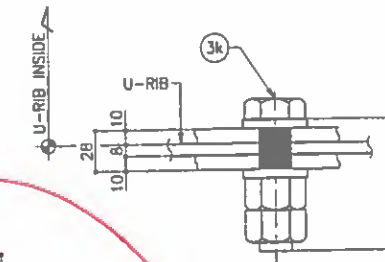
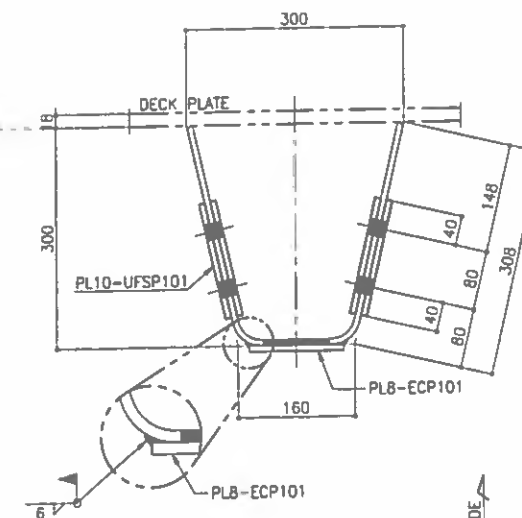
UFC01



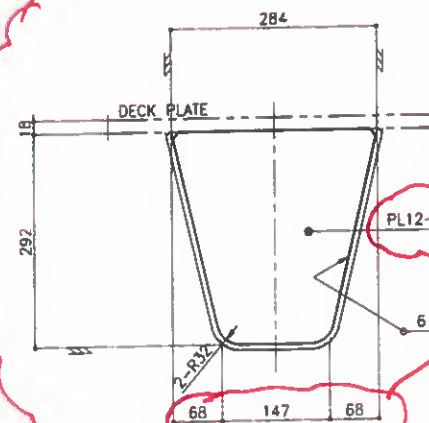
* BOLT : (3k) L=90 (2NUT+2WASHER)
QTY=24



SECT. A-A



BOLT DETAIL
L=90 (2NUT+2WASHER)



SECT. B

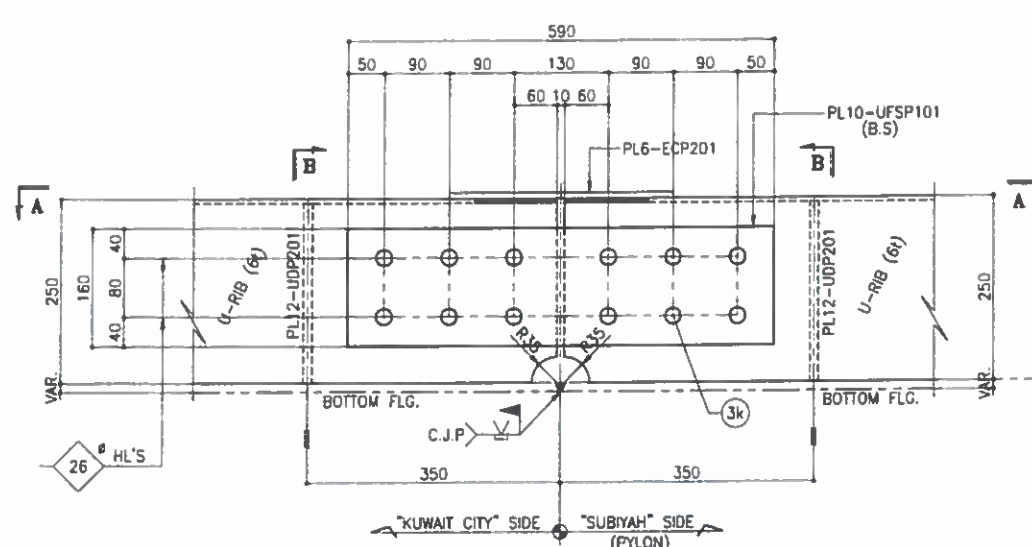
Refer To sec.3-B
on the design
drawing #
CW-DW-34441-B1
Contractor To clarify
The change in the
plate size.

U-RIB CONNECTION DETAIL [FIELD CONNECTION]

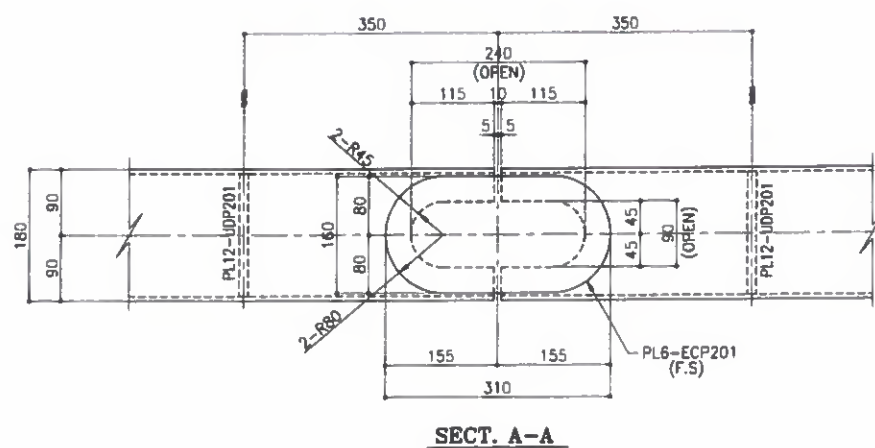
B. U-RIB FIELD CONNECTION [BOTTOM SIDE]

U-RIB : 6*250*500

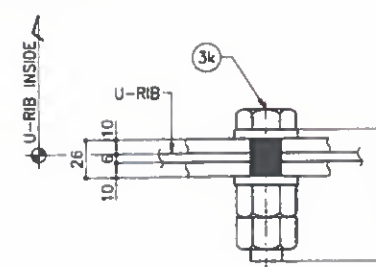
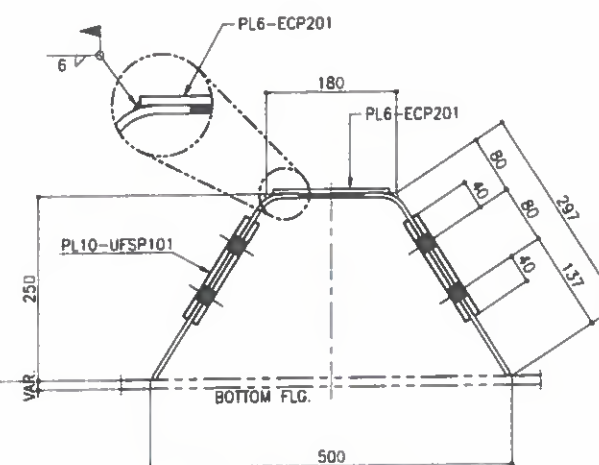
UFC21



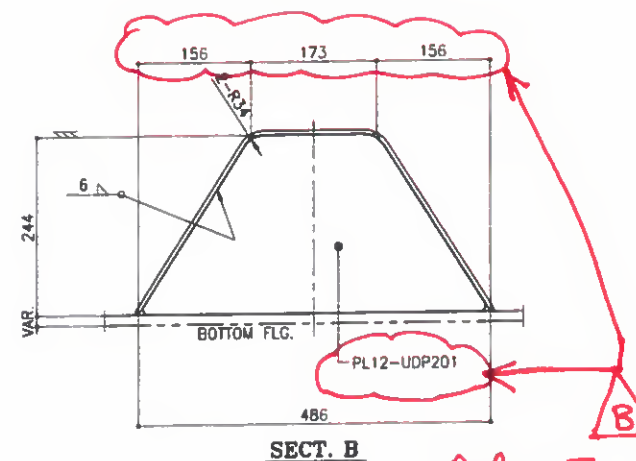
* BOLT : (3k) L=90 (2NUT+2WASHER)
Q'TY=24



SECT. A-A



BOLT DETAIL
L=90 (2NUT+2WASHER)

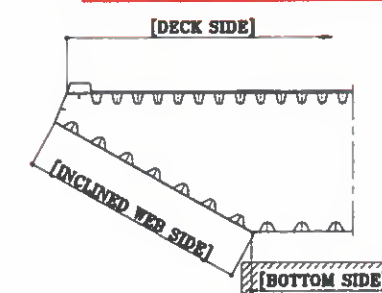


SECT. B

Refer To Sec 4-4 on The design drawing # CW-DW-34441-B1. Contractor To clarify change in The plate size.

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH	Q'TY	WT(Kg)	REMARK	REV.
UFC21	<U-RIB CONN.>	SET	ONE			
UFSP101	PL 10*160	590	4	30	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
ECP201	PL 6*160	310	2	2	A709M Gr.345	
3k	H.T.B M22-2N+2W	90	24		A325M Type1	
S.TOTAL=				54		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=30, C=10 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC	APPROV
-----	------	-------------------------	-------	------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE STEEL DECK
FIELD CONNECTION DETAIL-B (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.J.PARK	K.W.CHOI	S.S.SONG	S.M.KHON

DATE ISSUED : 2016.02.25
CONTRACTOR : HYUNDAI ENGINEERING & CONSTRUCTION

DRAWING NO. : RA140-22-BRG-SD-STD-211

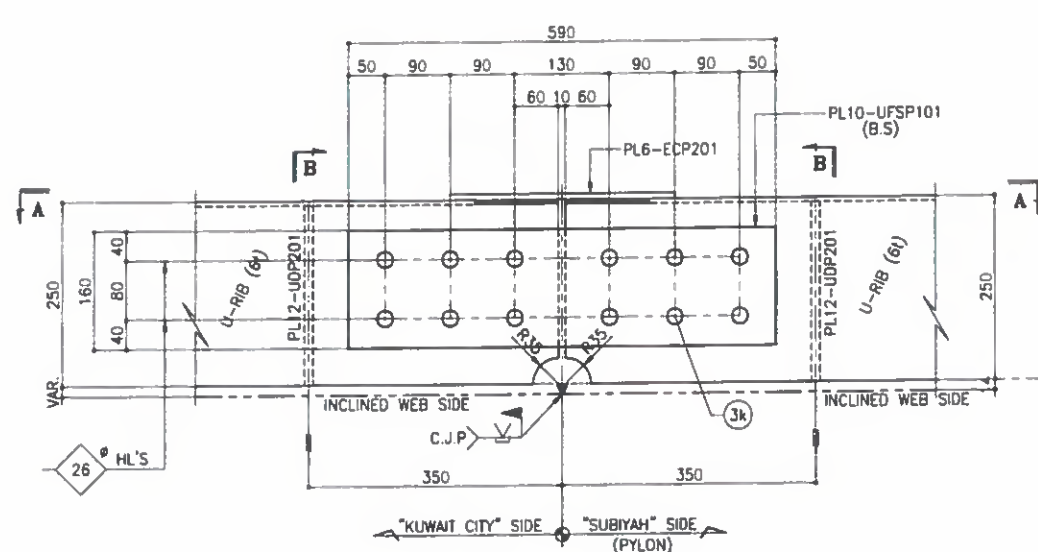
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

U-RIB CONNECTION DETAIL [FIELD CONNECTION]

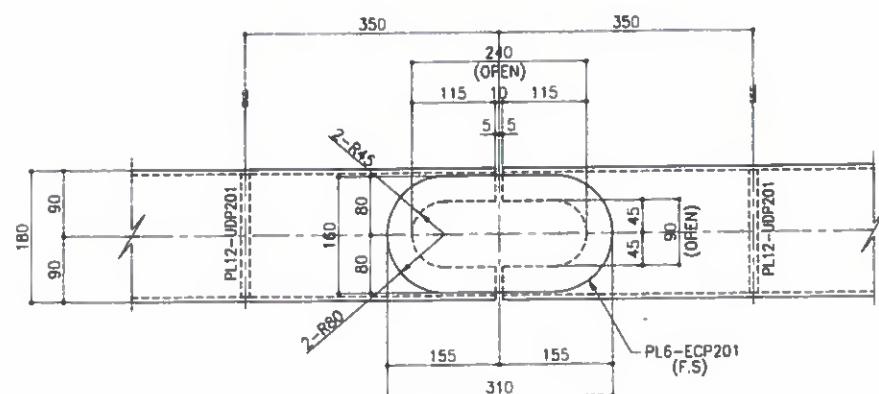
C. U-RIB FIELD CONNECTION [INCLINED WEB SIDE]

U-RIB : 6*250*500

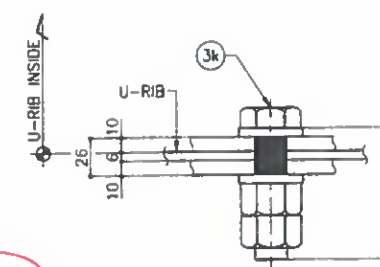
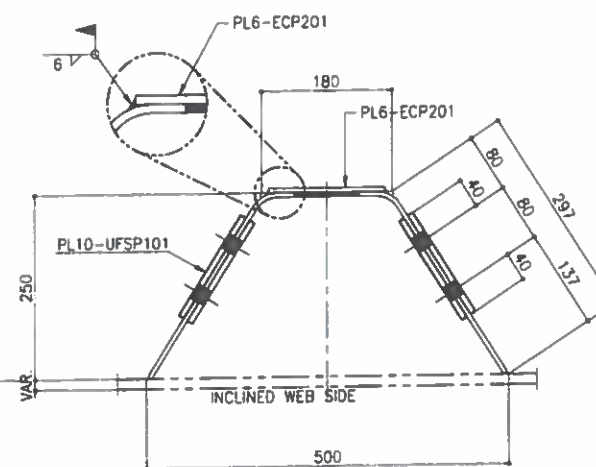
UFC31



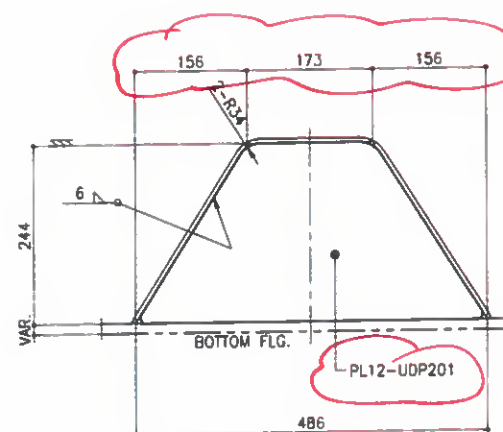
* BOLT : (3k) L=90 (2NUT+2WASHER)
QTY=24



SECT. A-A



BOLT DETAIL
L=90 (2NUT+2WASHER)



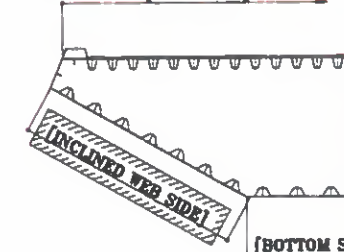
SECT. B

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
UFC31	<U-RIB CONN.>	SET	ONE			
UFC31	PL 10*160	590	4	30	A709M Gr.345	
UDP201	PL 12*244	486	2	22	A709M Gr.345	
ECP201	PL 6*160	310	1	2	A709M Gr.345	
3k	H.T.B M22-2N+2W	90	24		A325M Type1	
S.TOTAL=				54		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

[DECK SIDE]



[BOTTOM SIDE]

KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. GALVALAP R=35, D=10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
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EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
FIELD CONNECTION DETAIL-C (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION

Combined Group
Contracting Company

DRAWING NO.

RA140-22-BRG-SD-STD-221

REV.

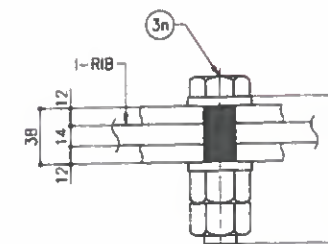
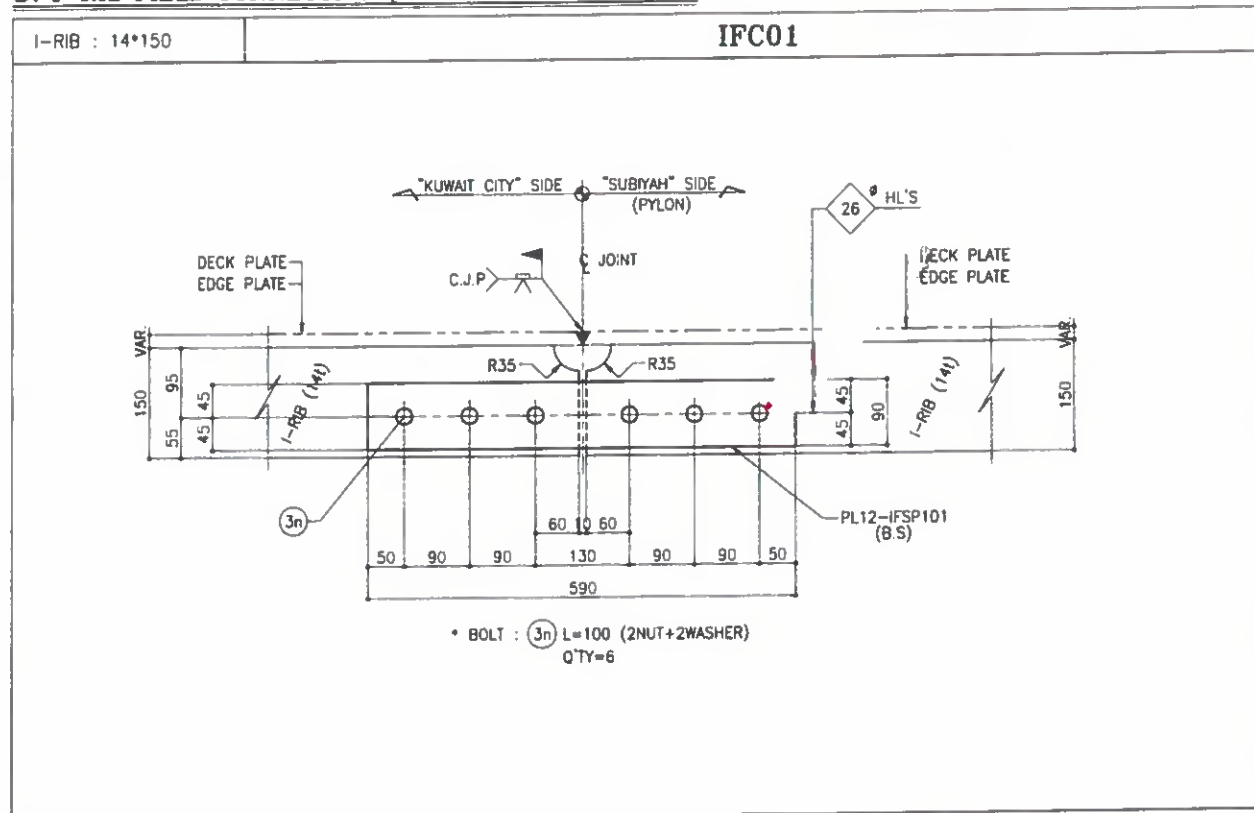
A B

Refer To comments
on Dhw. SD-STD-211

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

I-RIB CONNECTION DETAIL [FIELD CONNECTION]

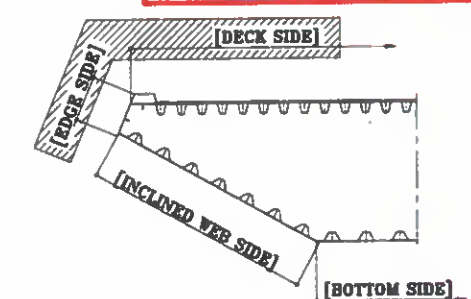
D. I-RIB FIELD CONNECTION [DECK & EDGE SIDE]



BOLT DETAIL
L=100 (2NUT+2WASHER)

BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK
IFC01	<I-RIB CONN>	SET	ONE		
IFSP101	PL 12*90	590	2	10	A709M Gr.345
3n	H.T.B M22-2N+2W	100	6		A325M Type1
				S.TOTAL=	10

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. ROLLUP R= 25, D= 10 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
FIELD CONNECTION DETAIL-D (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



DRAWING NO.
RA140-22-BRG-SD-STD-231

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

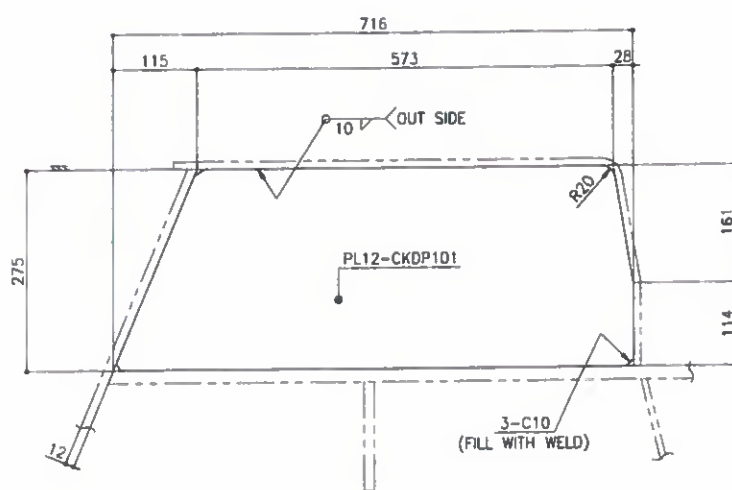
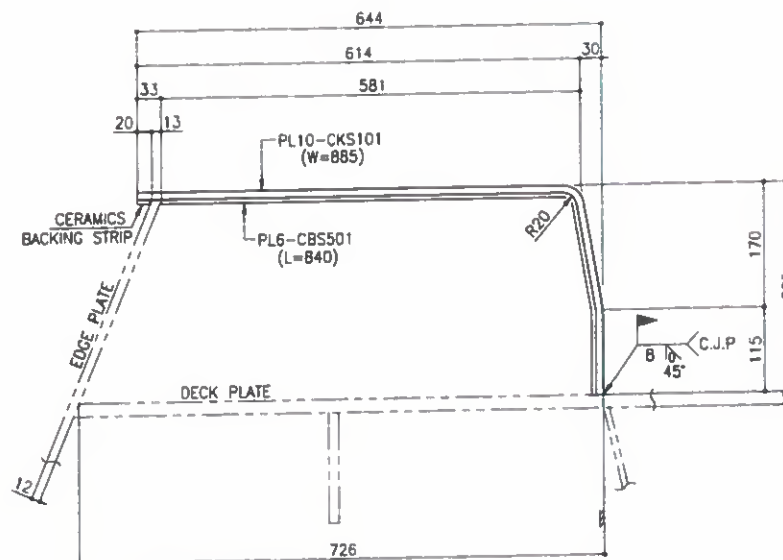
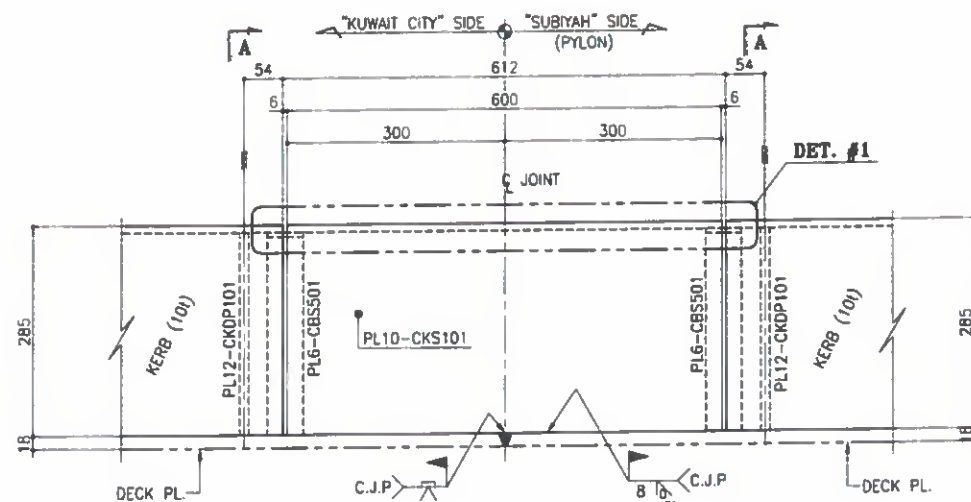
Submittal #92130 → Rev. A on 15-01-2016
Submittal #92120 → Rev. A on 28-12-2015

?!
B

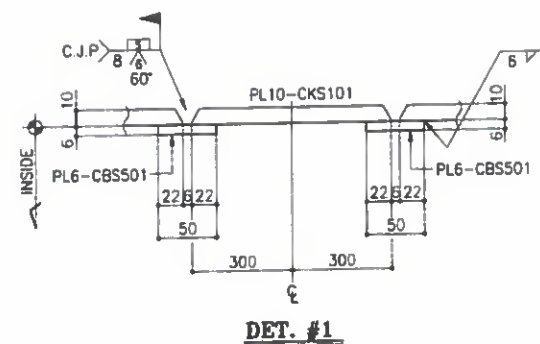
E. KERB FIELD CONNECTION [KERB SIDE]

KERB CONNECTION DETAIL [FIELD CONNECTION]

KFC01



SECT. A



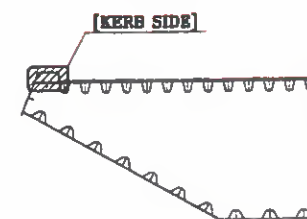
DET. #1

Refer to comments on DWG #
SD-STD-191-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
KFC01	<KERB CONN>	SET	ONE			
CKS101	PL 10*885	600	1	42	A709M Gr.345	
CKDP101	PL 12*275	716	2	37	A709M Gr.345	
CBS501	PL 6*50	840	2	4	A709M Gr.345	
S. TOTAL =				83		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=30, D=10 UNLESS NOTED
3. ALL FILLET WELD: 8 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
FIELD CONNECTION DETAIL-E (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:5	H.L.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

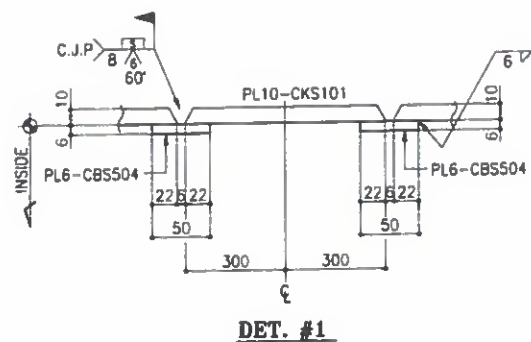
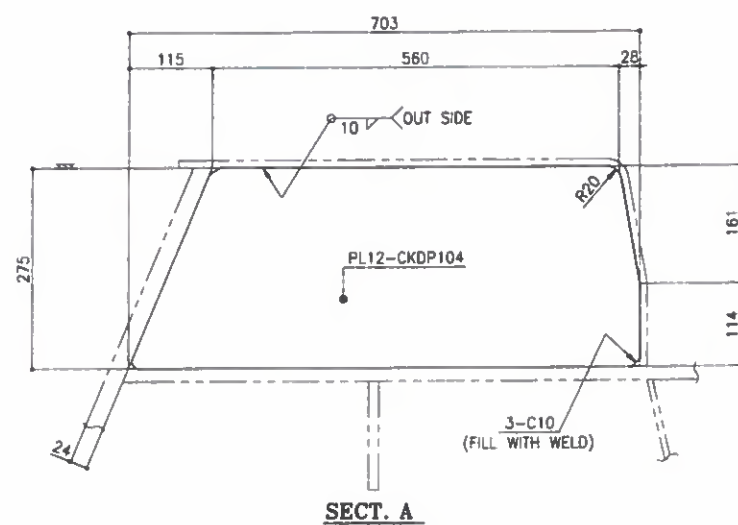
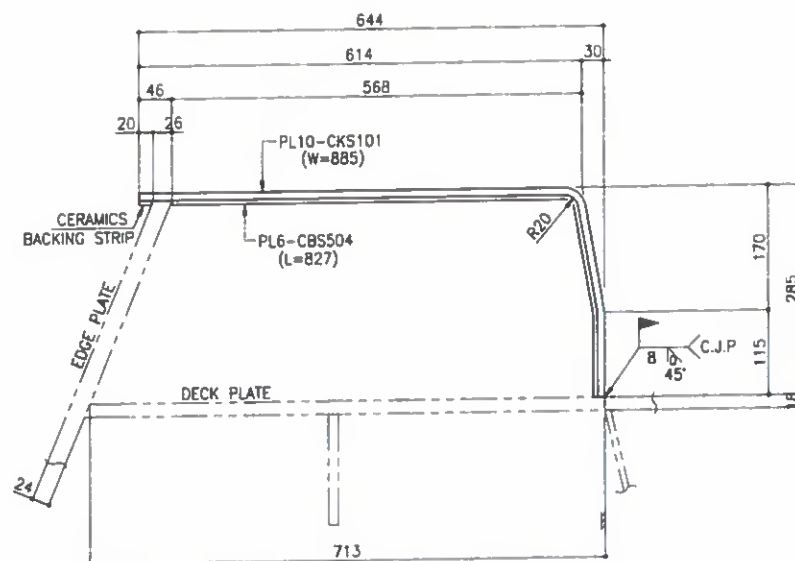
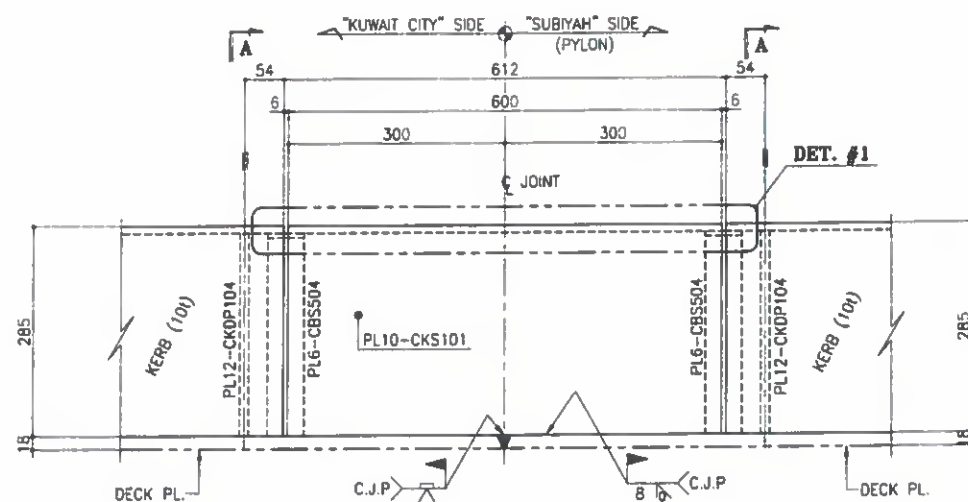
CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-STD-241

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

KERB CONNECTION DETAIL
[FIELD CONNECTION]

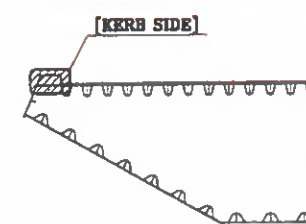
KFC02



Refer To comments on Dnw. #
SD-STD-191-A

[illegible]

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



KEY-PLAN

NOTES

1. MATERIALS SEE D.O.W. UNLESS NOTED
2. SCALLOP R= 35, O= 10 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

A	20/10/2025	FOR APPROVAL	H.I.MAN	S.S.SONG	S.MUNO	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.	
EMPLOYER						

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAFTING TITLE

**MAIN BRIDGE
STEEL DECK**

FIELD CONNECTION DETAIL-E (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION


Combined Group
 Contracting Company

DRAWING NO.

RA140-22-BRG-SD-STD-242

REV

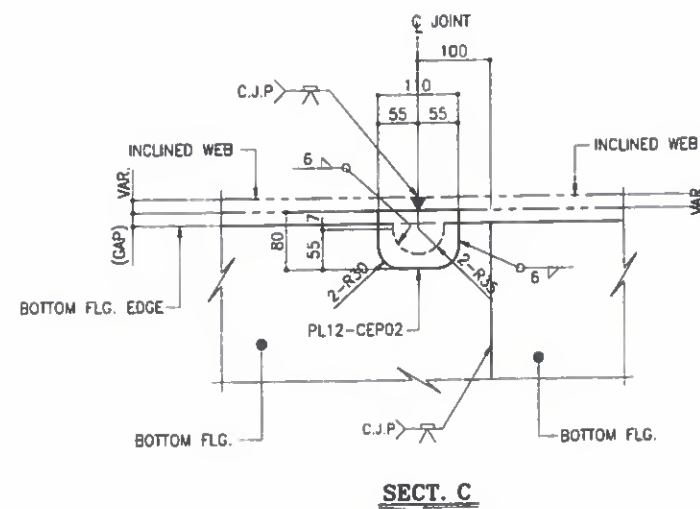
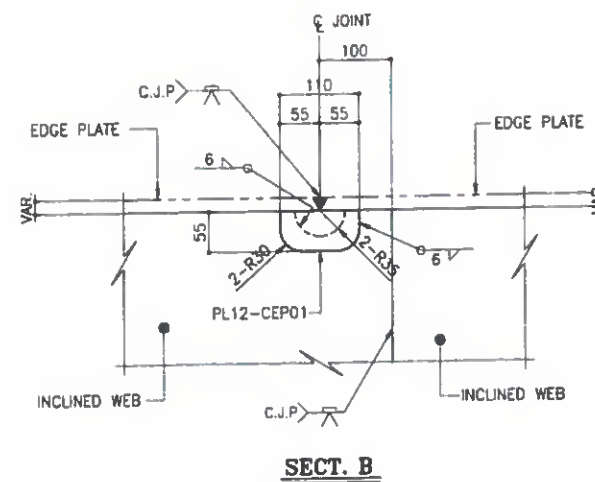
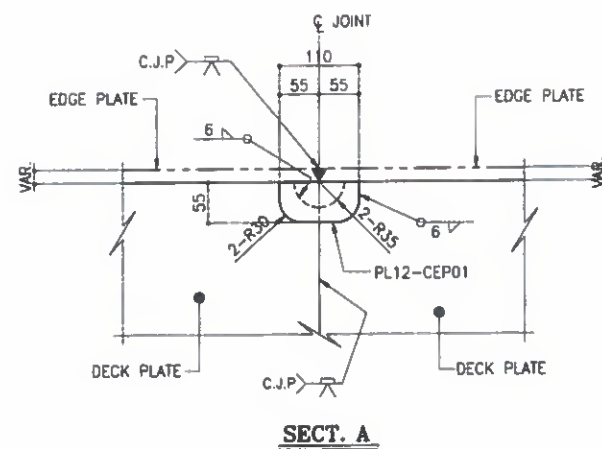
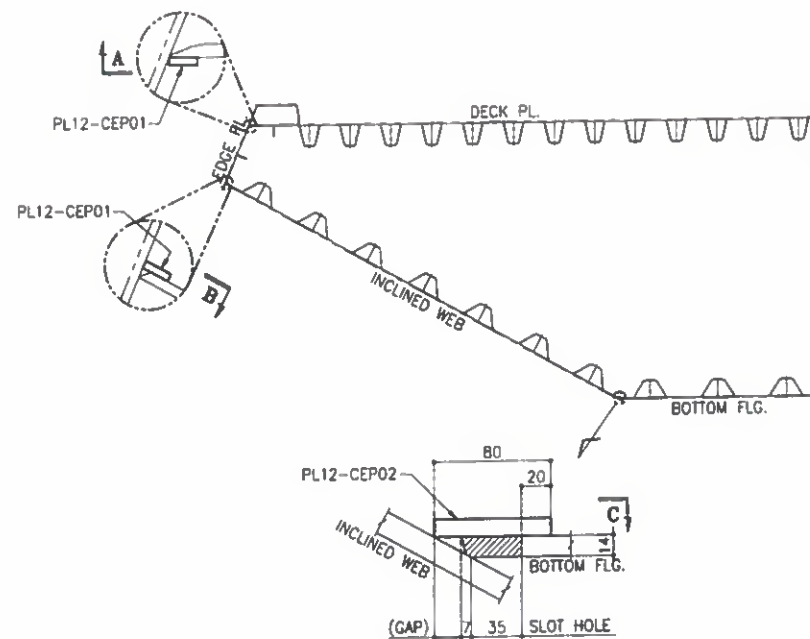
A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

SPLICE DETAIL

SP01, SP02



BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
SP01	<SPICE>	SET	ONE			
SP02	<SPICE>	SET	ONE			
CEP01	PL 12*55	110	4	2	A709M Gr.345	
CEP02	PL 12*80	110	2	2	A709M Gr.345	
			S.TOTAL =	4		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, O= 10 mm UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPROD.
------	------	-------------------------	-------	--------	---------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SPLICE DETAIL (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI **Combined Group**
Engineering & Construction

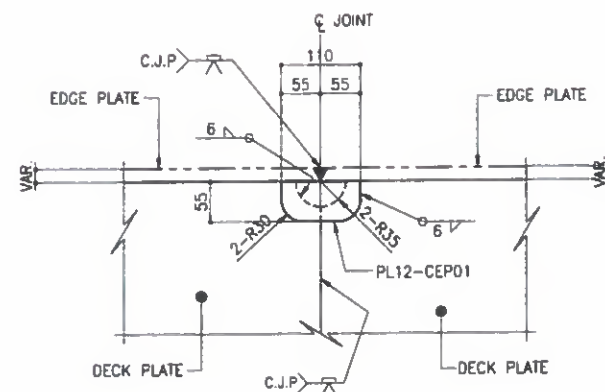
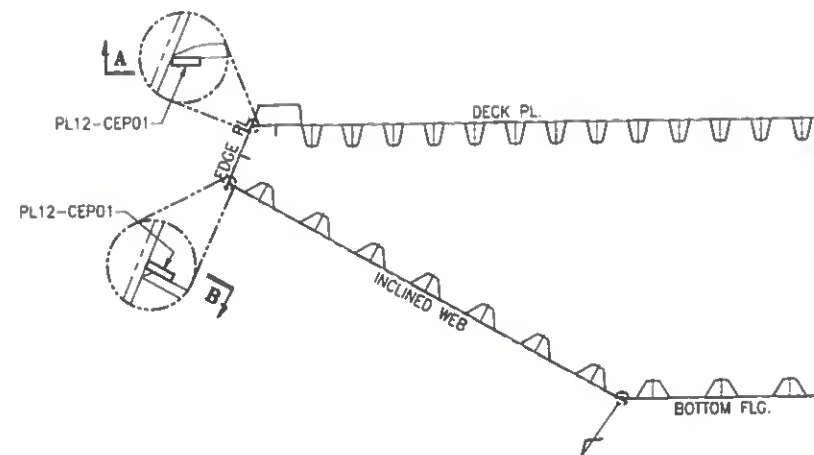
DRAWING NO.
RA140-22-BRG-SD-STD-301

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

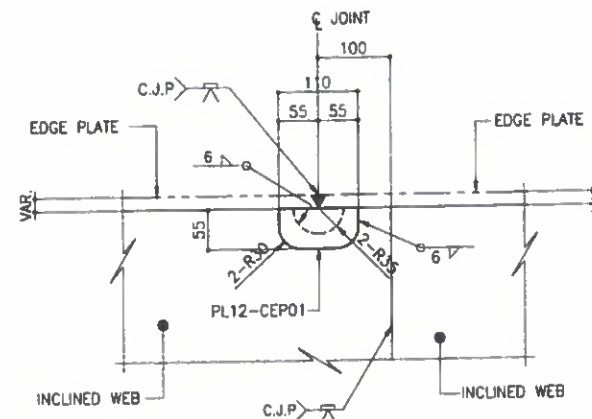
Provide approved design reference for details in sections A, B and C

SPLICE DETAIL

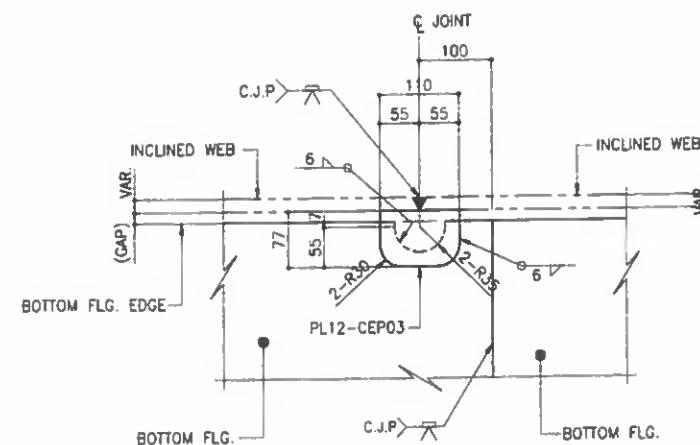
SP04~08



SECT. A



SECT. B



SECT. C

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
SP04	<SPICE>	SET	ONE			
SP05	<SPICE>	SET	ONE			
SP06	<SPICE>	SET	ONE			
SP07	<SPICE>	SET	ONE			
SP08	<SPICE>	SET	ONE			
CEP01	PL 12*55	110	4	2	A709M Gr.345	
CEP03	PL 12*77	110	2	2	A709M Gr.345	
S.TOTAL=				4		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD: 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SPLICE DETAIL (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

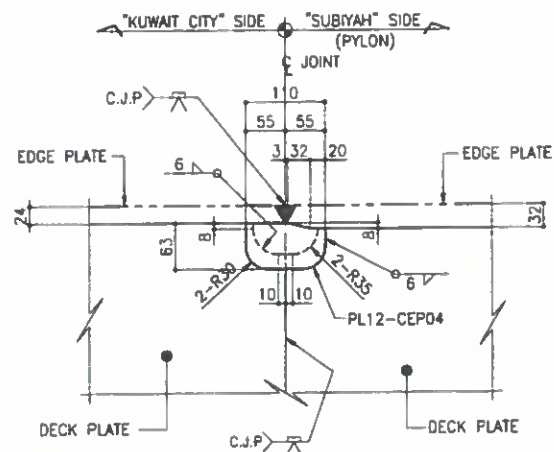
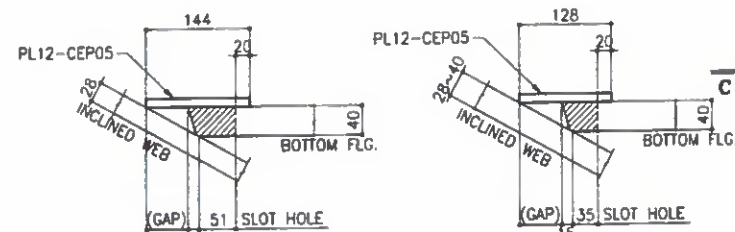
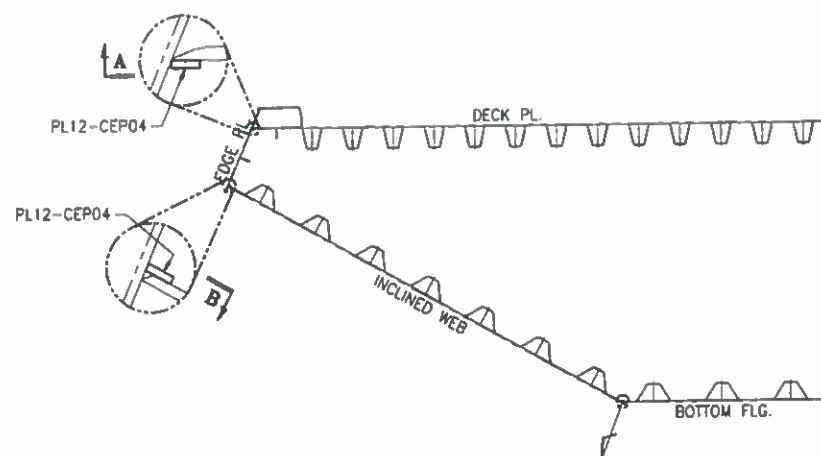
DRAWING NO.
RA140-22-BRG-SD-STD-302

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

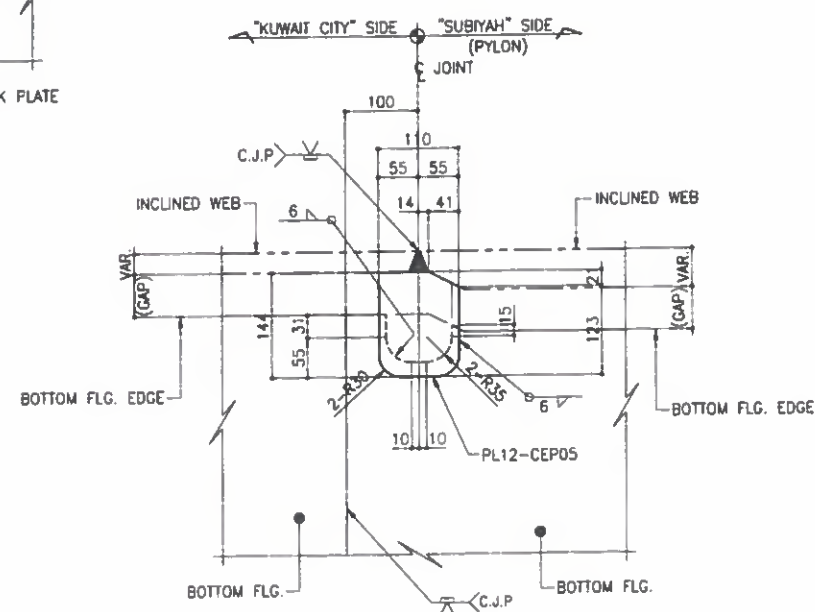
Refer To comments on
Drw. SD-STD-301

SPLICE DETAIL

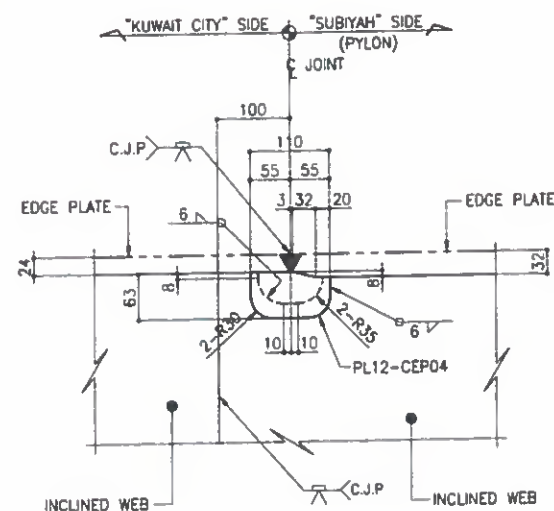
SP10



SECT. A



SECT. C



SECT. B

Refer To comments on
Dnw. # SD-STD-301

FOR
APPROVAL

2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
SP10	<SPICE>	SET	ONE			
CEP04	PL 12*63	110	4	3	A709M Gr.345	
CEP05	PL 12*144	110	2	3	A709M Gr.345	
S.TOTAL=				6		

HYUNDAI E&S
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLUP 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" UNLESS NOTED
3. ALL FILLET WELD: 1/8" UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SPLICE DETAIL (3)**

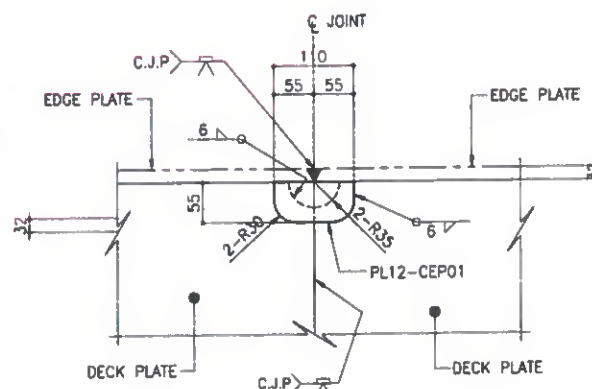
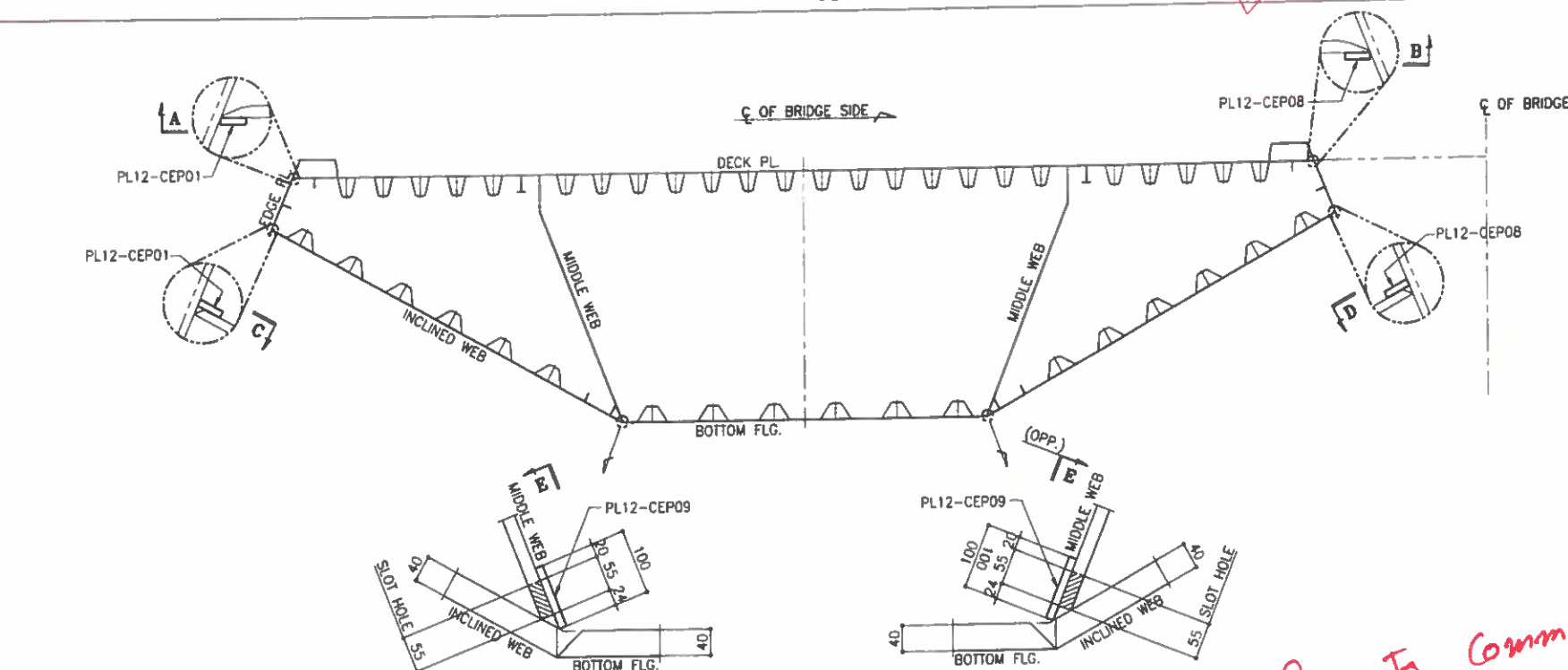
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
**HYUNDAI E&S
YOULCHON**

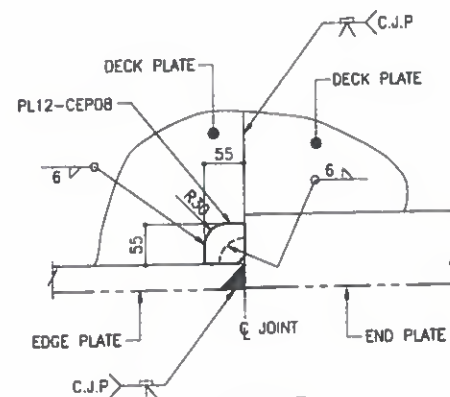
DRAWING NO.
RA140-22-BRG-SD-STD-303

SPLICE DETAIL

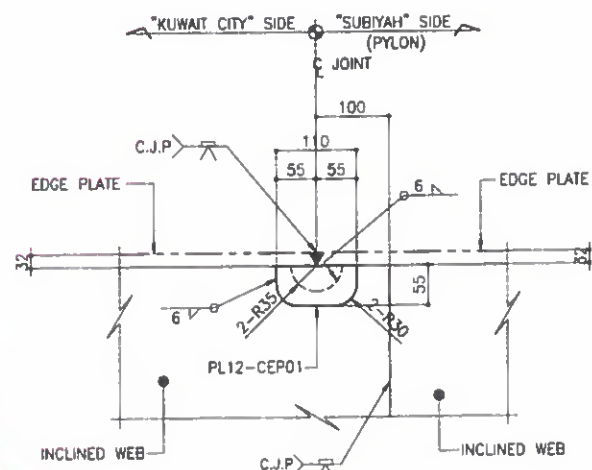
SP11



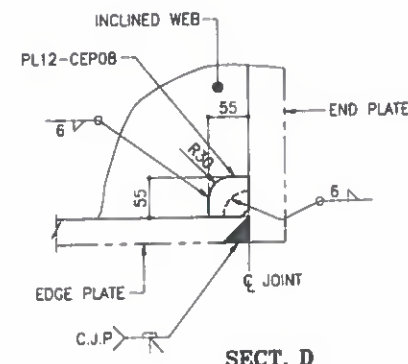
SECT. A



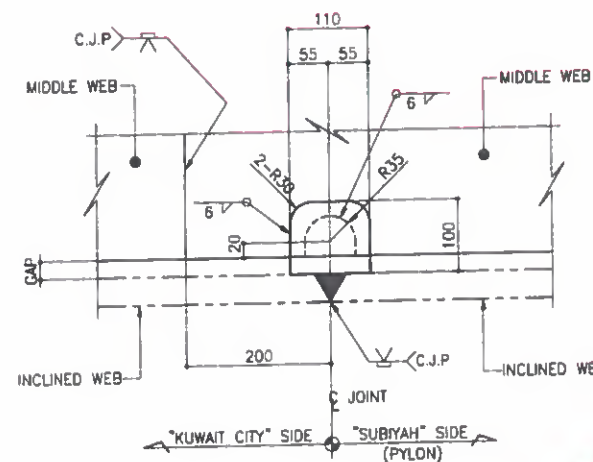
SECT. B



SECT. C



SECT. D



SECT. E

Refer To Comments on
Dnw. # SD-STD-301

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
SP11	<SPLICE>	SET	ONE			
CEP01	PL 12*55	110	2	1	A709M Gr.345	
CEP08	PL 12*55	55	2	1	A709M Gr.345	
CEP09	PL 12*55	110	2	1	A709M Gr.345	
S.TOTAL =				3		

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

NOTES

1. MATERIALS SEE S.O.D. UNLESS NOTED
2. SCALLOP R=25, C=10 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SPLICE DETAIL (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

DATE ISSUED : 2016.02.25
CONTRACTOR : 2016.02.25

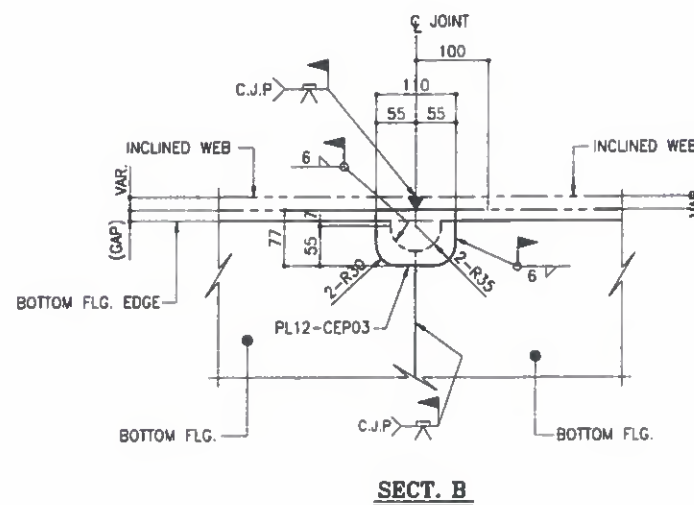
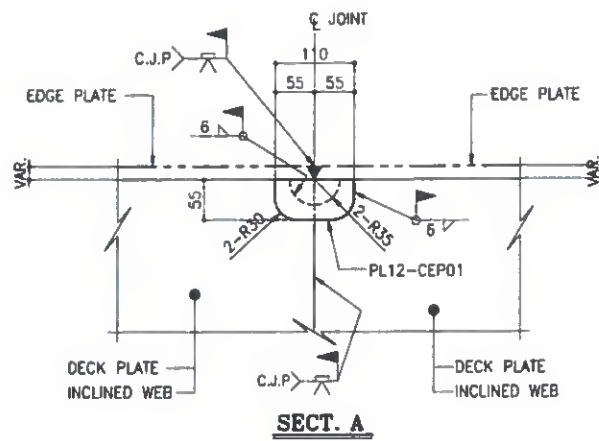
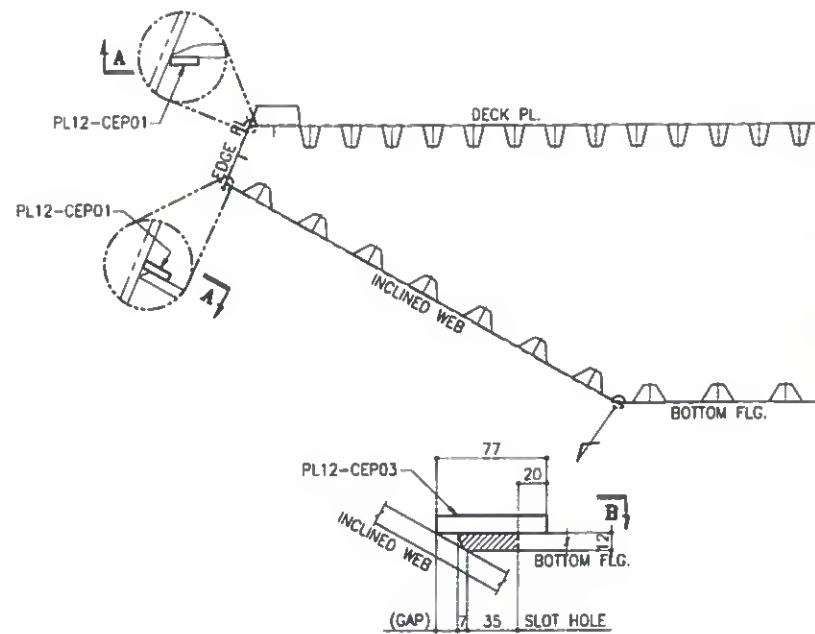
HYUNDAI **Combined Group**
Engineering & Construction

DRAWING NO. **RA140-22-BRG-SD-STD-304**

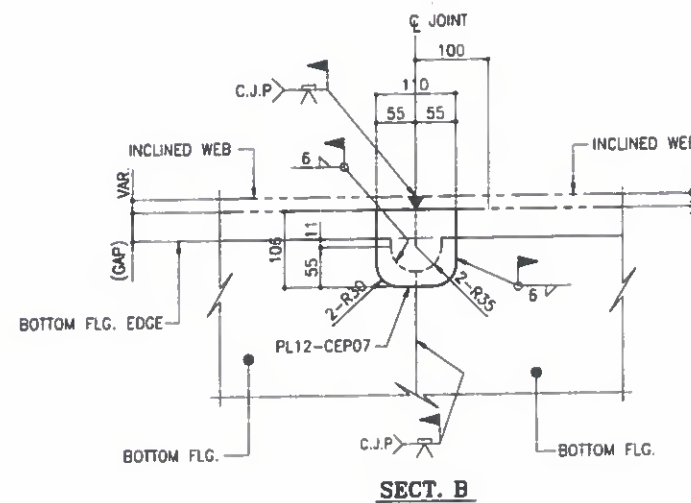
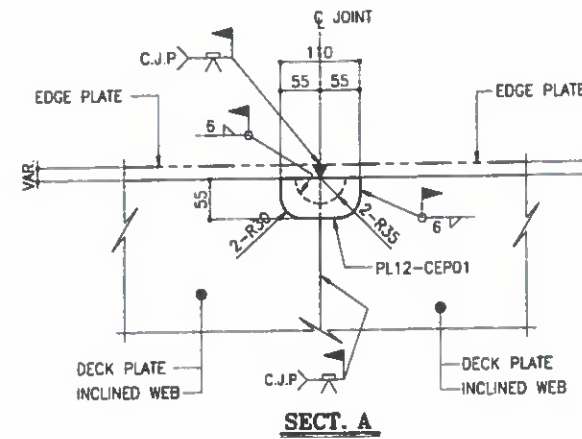
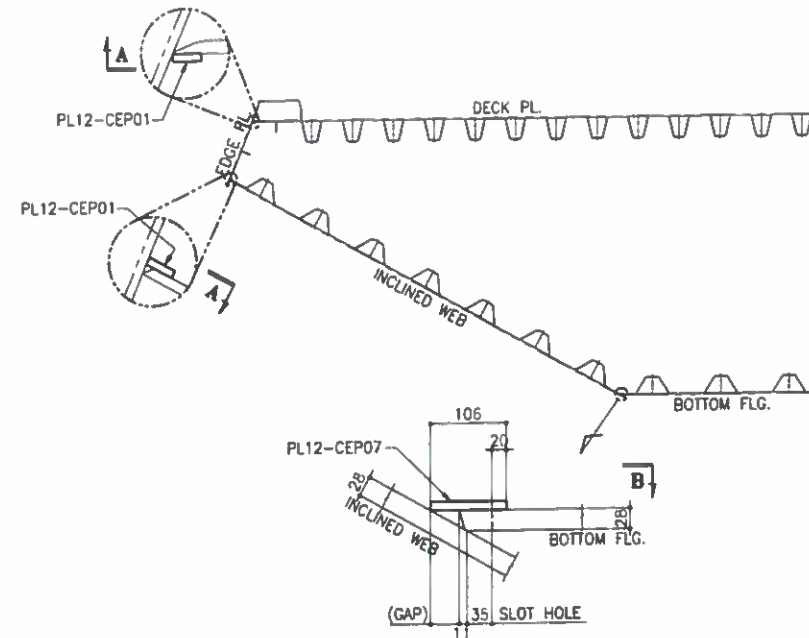
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

SPLICE DETAIL

FS01



FS02



BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
FS01	<SPICE>	SET	ONE			
CEP01	PL 12*55	110	4	2	A709M Gr.345	
CEP03	PL 12*77	110	2	2	A709M Gr.345	
	S.TOTAL =		4			
FS02	<SPICE>	SET	ONE			
CEP01	PL 12*55	110	4	2	A709M Gr.345	
CEP07	PL 12*106	110	2	2	A709M Gr.345	
	S.TOTAL =		4			

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

Refer to comments on dwg. SD-STD-301

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SPLICE DETAIL (5)

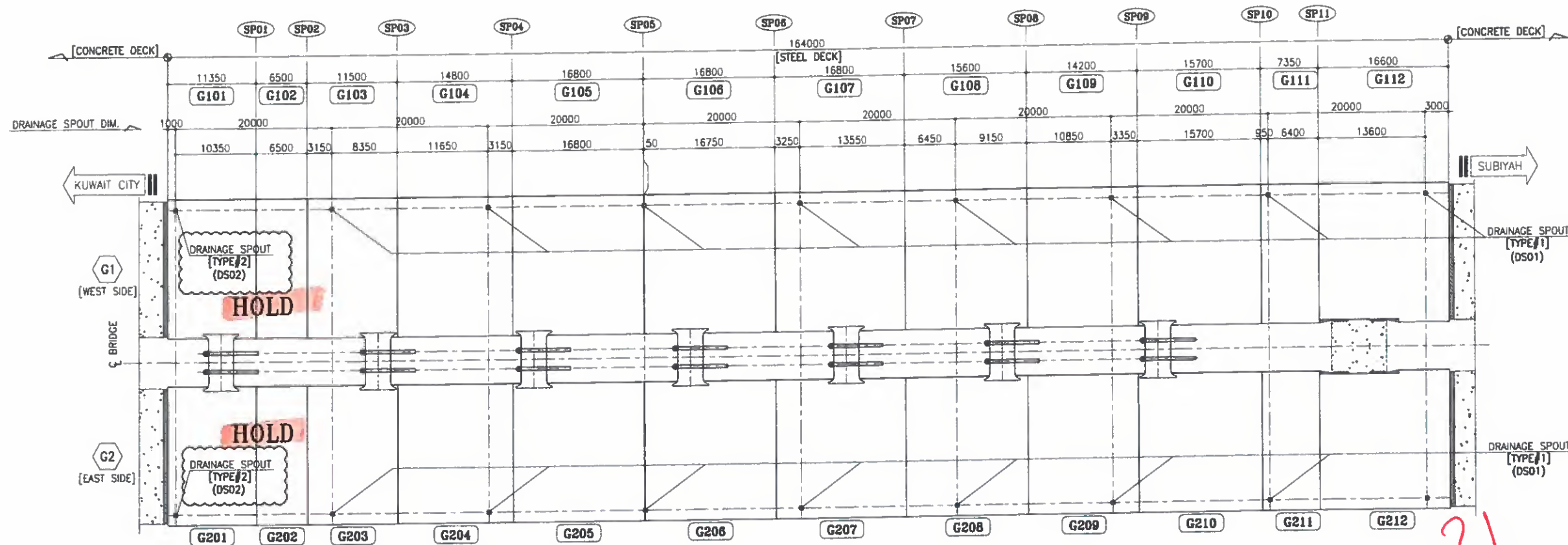
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 5	H.I.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

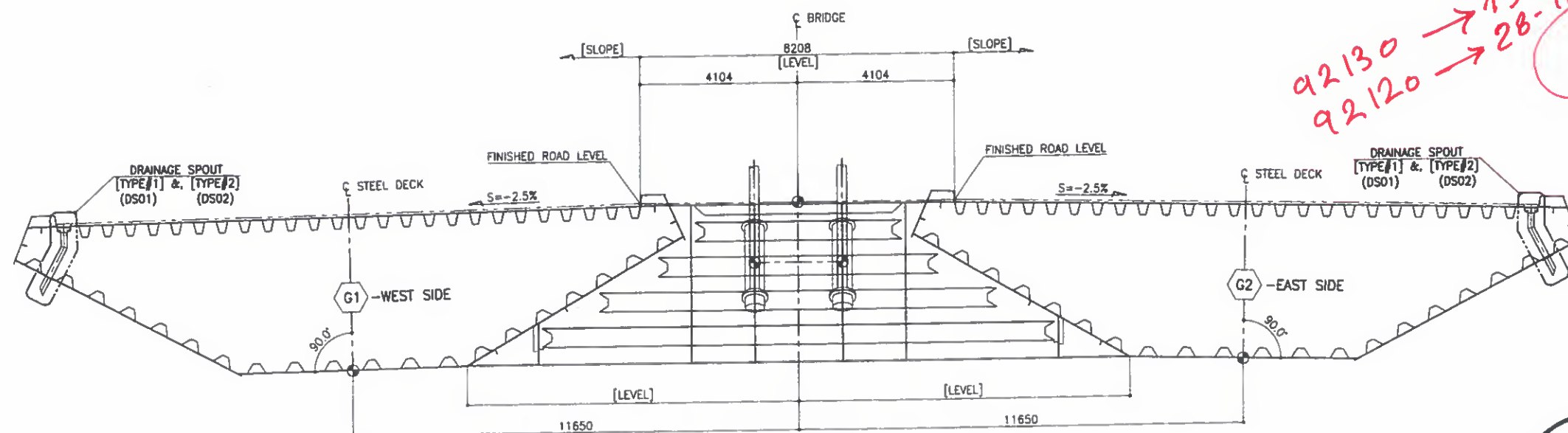
DRAWING NO.
RA140-22-BRG-SD-STD-305

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAINAGE SPOUT ARRANGEMENT



TYPICAL CROSS SECTION



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

Rev. A on 15-01-2016
92130 → 28-12-2015
92120 → B

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
DRAINAGE SPOUT ARRANGEMENT (1)

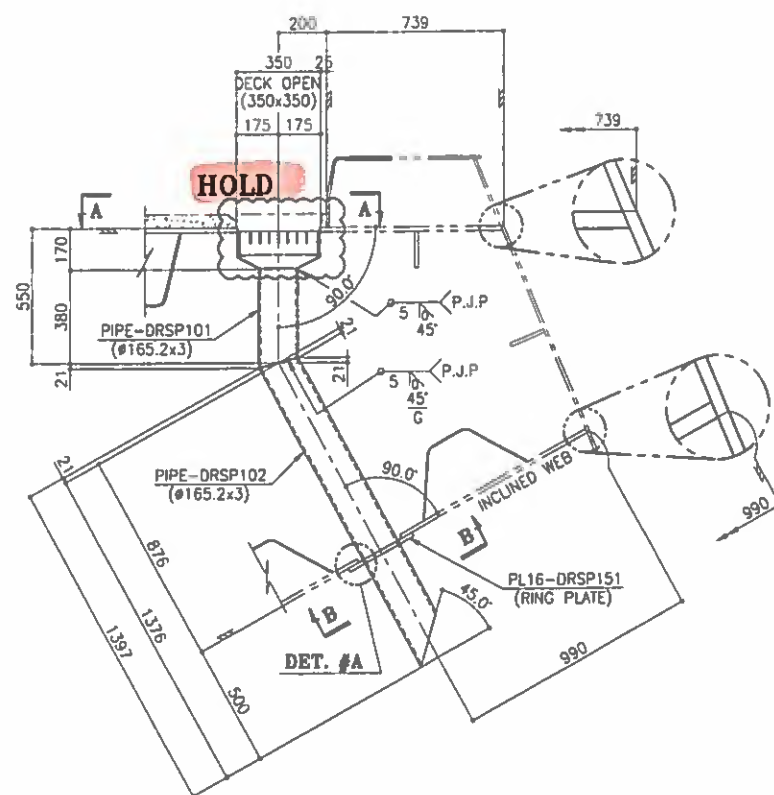
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W. CHOI	S.S. SON	S.M. KHORRAM

DATE ISSUED: 2016.02.25
CONTRACTOR: HYUNDAI E&S

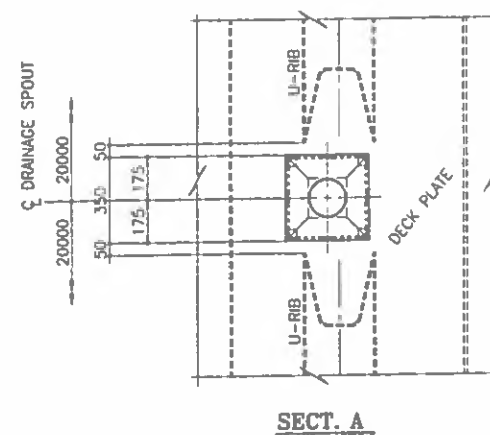
HYUNDAI
Engineering & Construction

DRAWING NO.
RA140-22-BRG-SD-STD-401

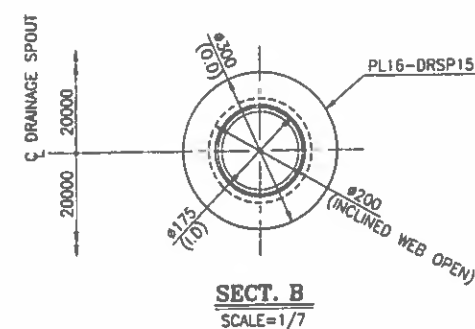
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



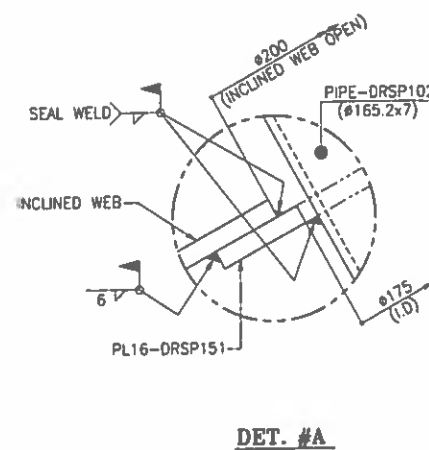
DRAINAGE SPOUT DETAIL [TYPE#1]
(DS01)



SECTION A



SECTION B
SCALE=1/7



DET. #A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
DS01	<DRAINAGE SPOUT>	SET	ONE			
DRSP101	PIPE D165.2*3	401	1	5	A269 Gr.304	
DRSP102	PIPE D165.2*3	1397	1	17	A269 Gr.304	
DRSP151	PL 16*300	300	1	11	A709M Gr.345	
S.TOTAL =				33		

HYUNDAI CONSTRUCTION
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R=35, C=10 UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

92120 → Rev. A on 28-12-2015
92130 → Rev. A on 15-1-2016

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
1	2016.02.25		H.I.PARK	S.S.SON	S.M.KHOI

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
DRAINAGE SPOUT DETAIL (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 15	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI CONSTRUCTION
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-STD-402

REV.
A

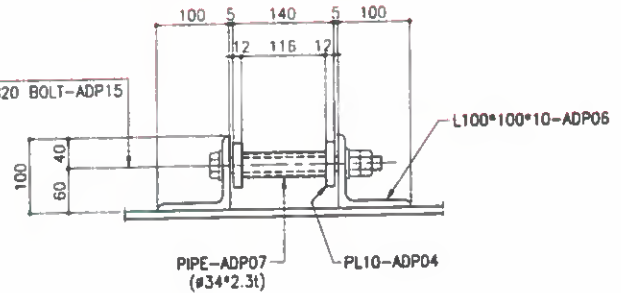
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

(Provide approved Reference)

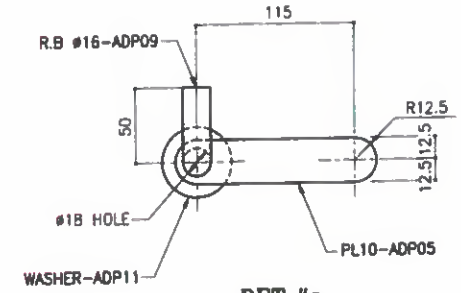
BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
DR1	<DOOR>	SET	ONE			
ADP01	PL 10*1020	1320	1	106	A709M Gr.345	
ADP02	PL 10*1180	1480	1	137	A709M Gr.345	
ADP03	PL 10*120	160	4	6	A709M Gr.345	
ADP04	PL 12*70	400	4	11	A709M Gr.345	
ADP05	PL 10*25	140	1		A709M Gr.345	
ADP06	L 100*100*10	60	4	4	A500 Gr.345	
ADP07	PIPE D34*2.3	116	2		A500 Gr.345	
ADP08	R.B D16	116	2		A500 Gr.345	
ADP09	R.B D16	252	1		A500 Gr.345	
ADP10	R.B D16	200	2		A500 Gr.345	
ADP11	PL 4.5*40	40	2		A709M Gr.345	
ADP12	CB M12	40	1		A500 Gr.345	
ADP15	M20*2N*2W	225	2		A325M Type1	
S.TOTAL=			263			

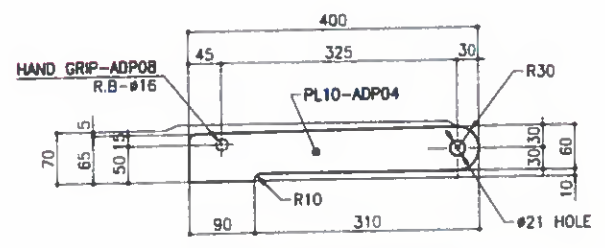
22 HL'S FOR M20 BOLT-ADP15



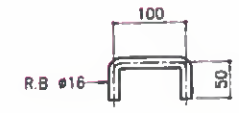
SECT. B-B



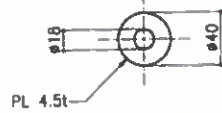
DET. #a



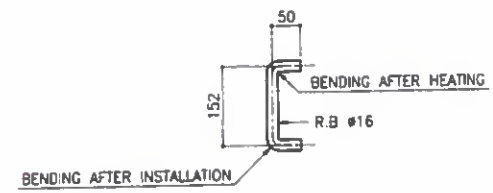
"PL10-ADP04" DETAIL



"R.B #16-ADP10" DETAIL



"WASHER-ADP11" DETAIL



"R.B #16-ADP09" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP IN 25, 0= 10= UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

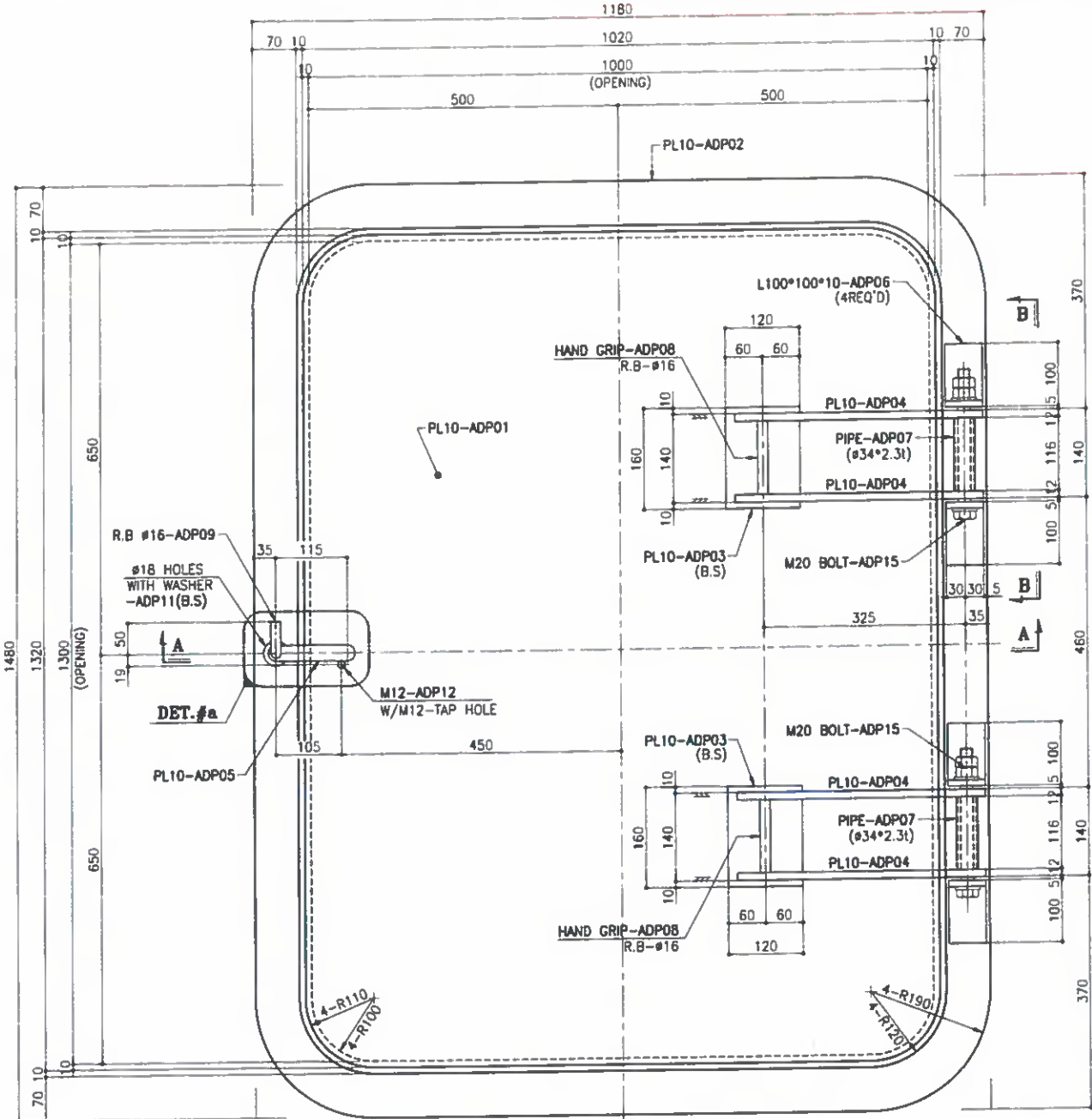
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
DOOR DETAIL (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	HLPARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

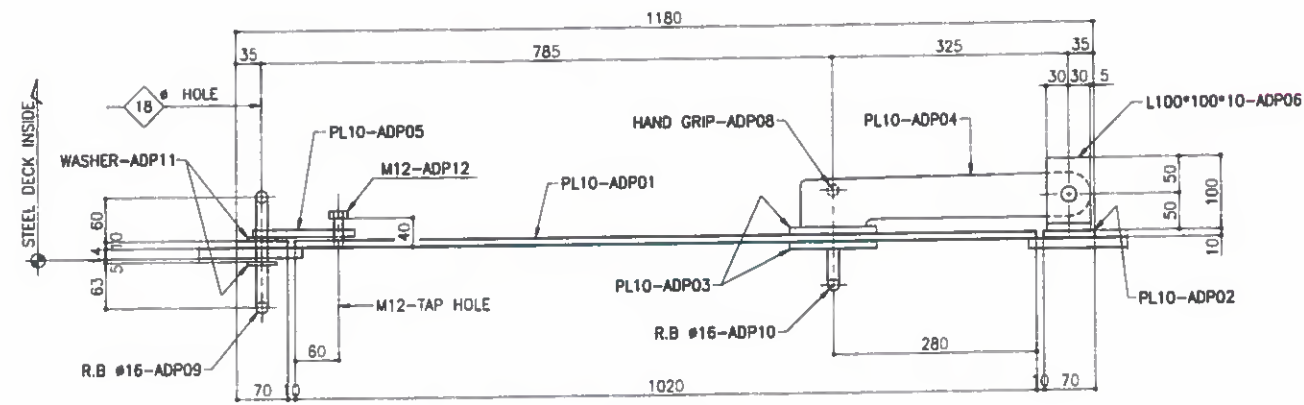
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-STD-451
REV.
A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



DOOR - DR1



SECT. A-A

Refer To Comments on The same drawing no. under submitted
RA140-32-BRG-CW DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D01	<DIAPHRAGM>	ONE				
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWU01D	PL 18*474	5946	1	398	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU01DA	PL 18*472	5088	1	339	A709M Gr.345	
BWU01DB	PL 18*472	5088	1	339	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BWE01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL01A	PL 10*200	545	2	17	A709M Gr.345	
VSL01B	PL 10*200	545	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				5034		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D01" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOUNGCHON

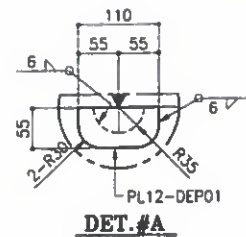
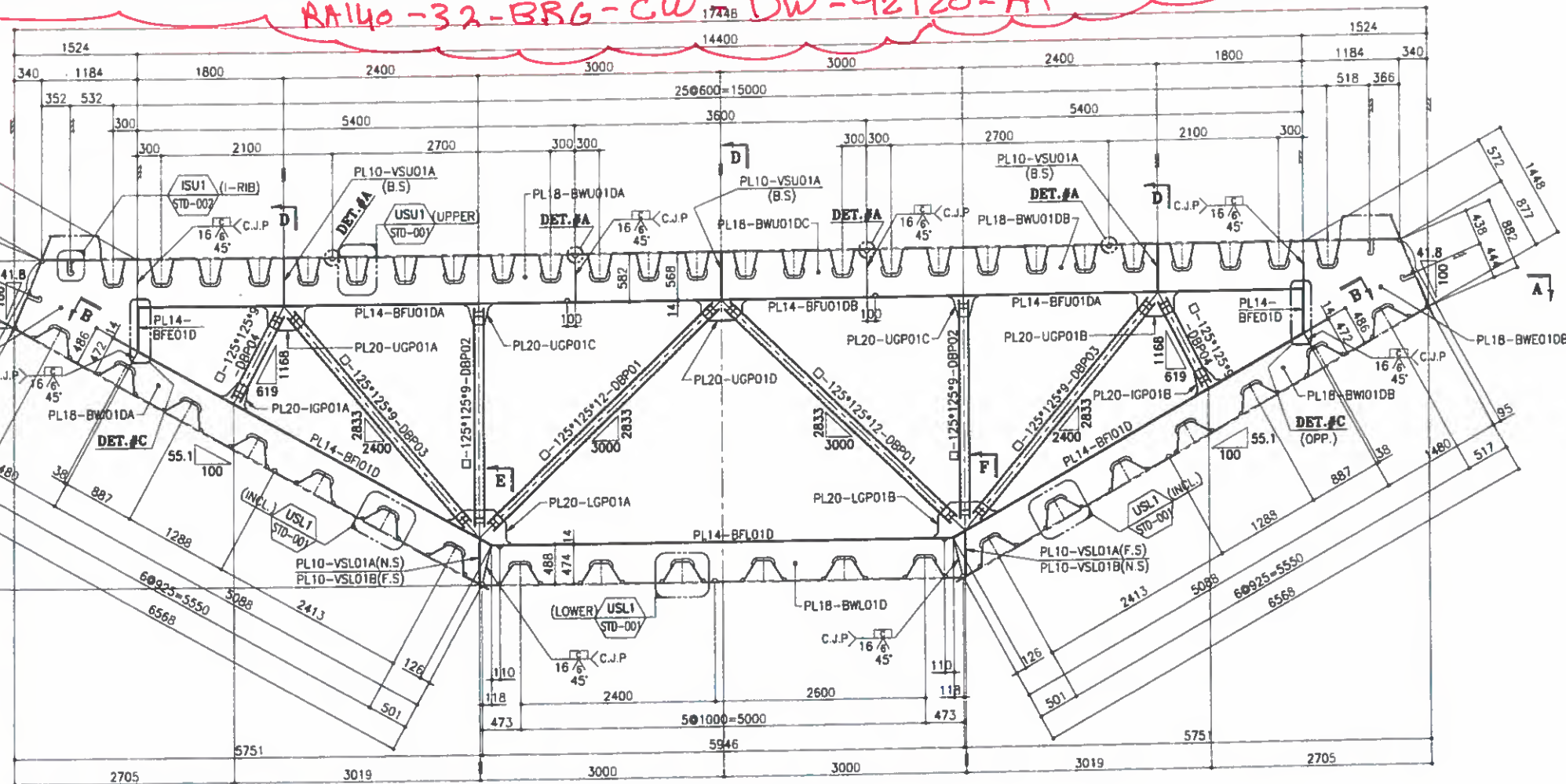
DRAWING NO.
RA140-22-BRG-SD-SEC-001

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOUNGCHON

NOTES

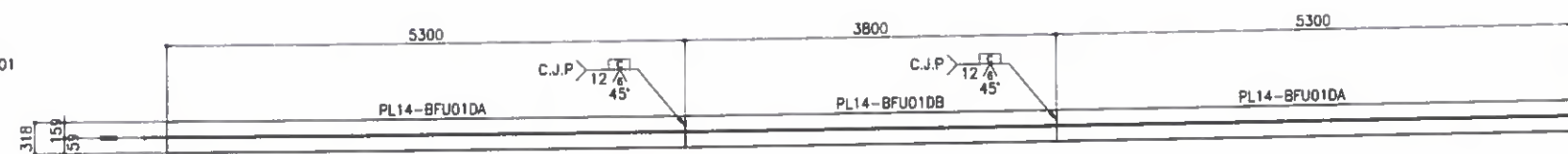
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , O= 10 UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

SECTION D01

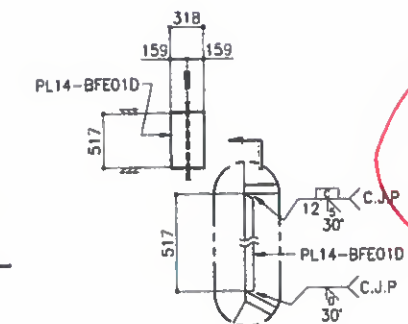
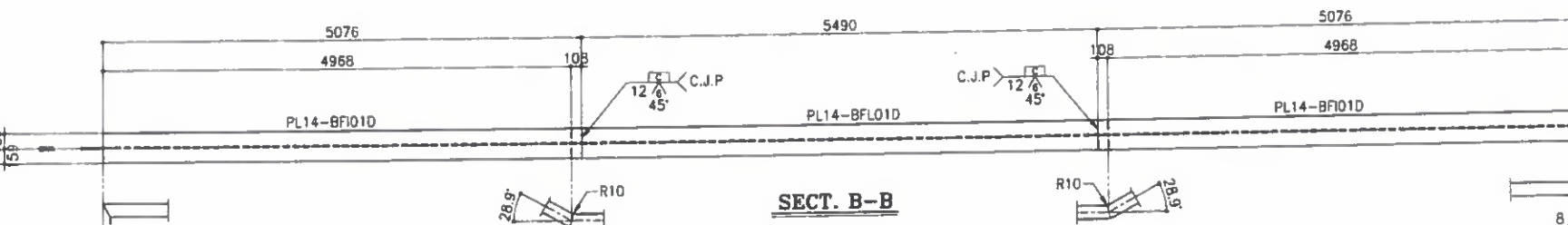


DET. #A

SECT. A-A



SECT. B-B



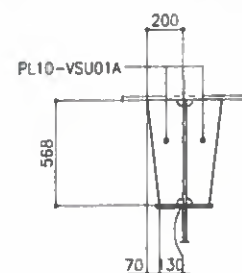
DET. #C

REF. DRAWING

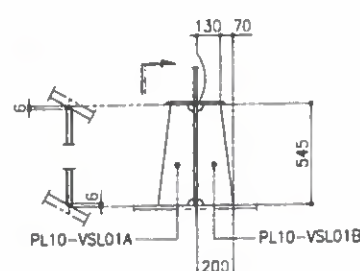
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

ON SCALE

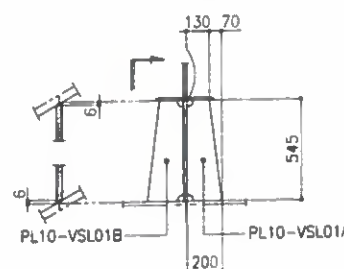
Refer To comments on The same drawing number under submittal
RA140-32-BRG-CW-DW-92120-A1



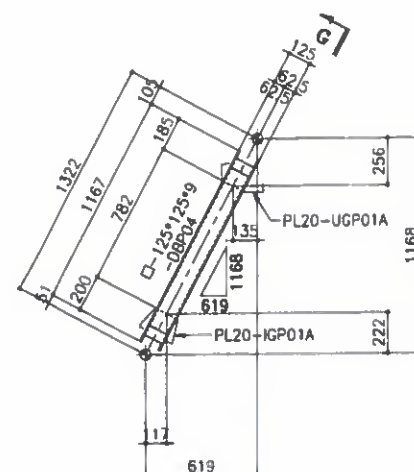
SECT. D



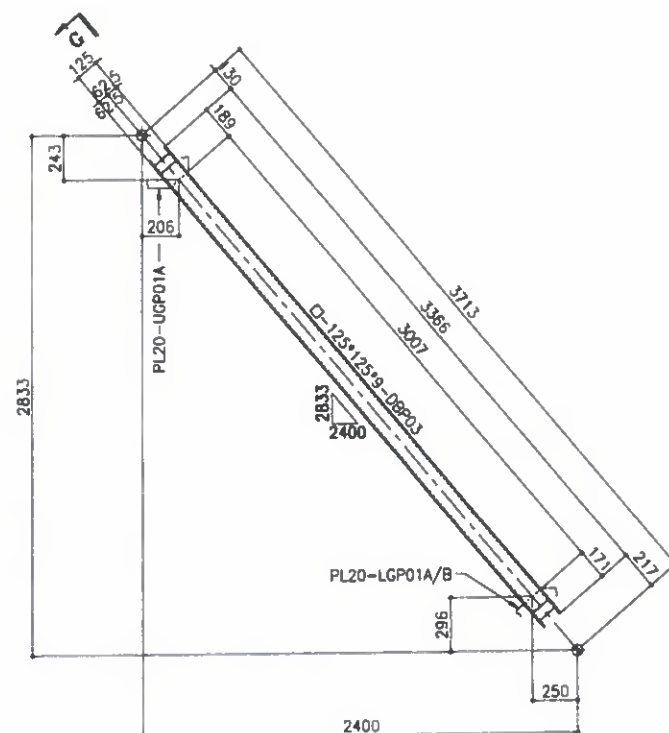
SECT. E



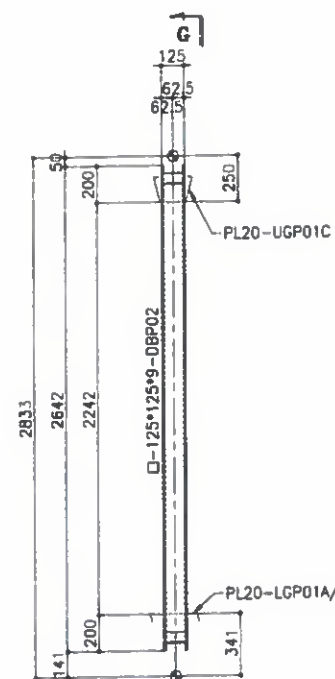
SECT. F



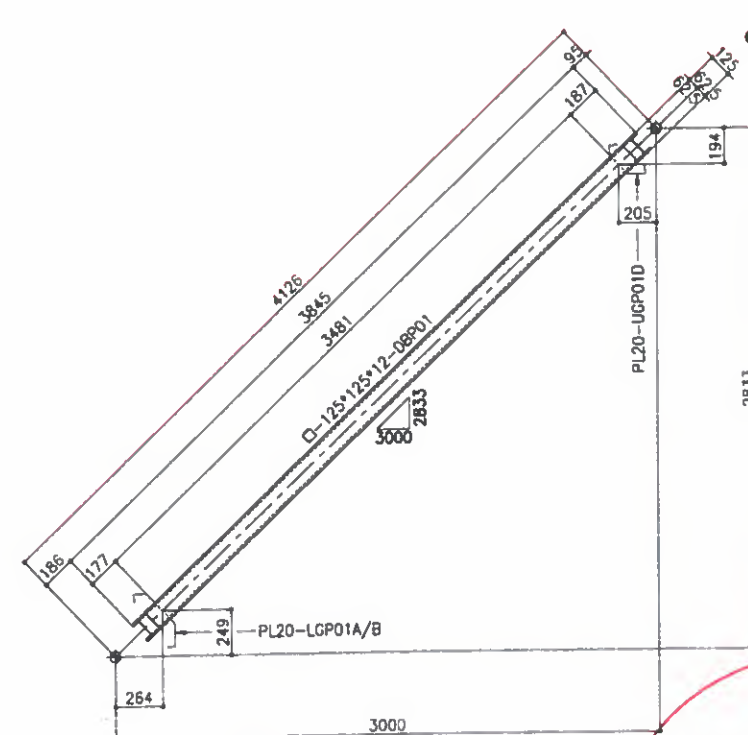
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



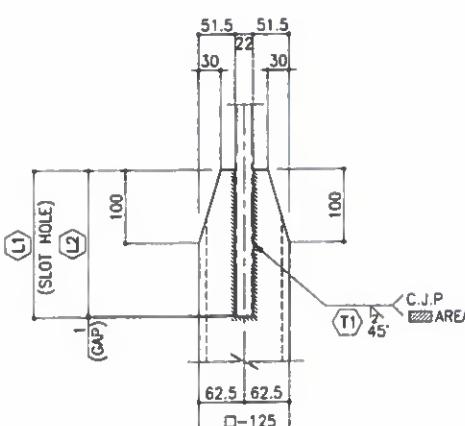
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



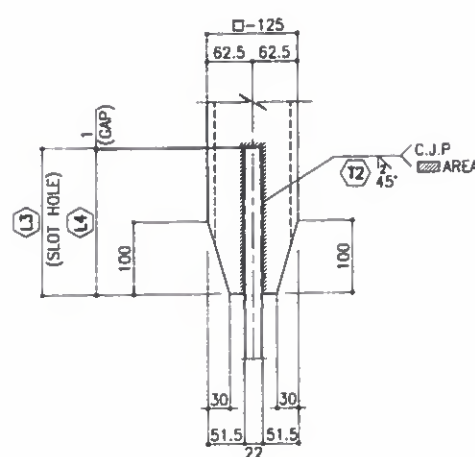
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R=30, D=10 mm UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28/12/2015

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
-----	------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D01" (2)

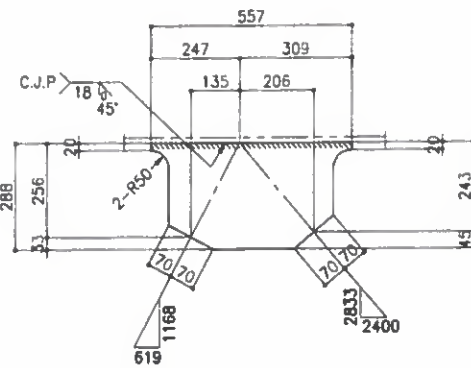
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON

CONTRACTOR
HYUNDAI E&S
YOULCHON

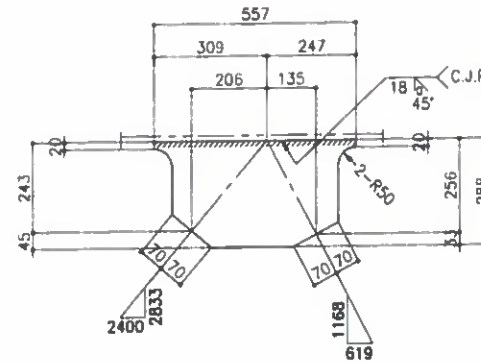
DRAWING NO.
RA140-22-BRG-SD-SEC-002

REV.
A

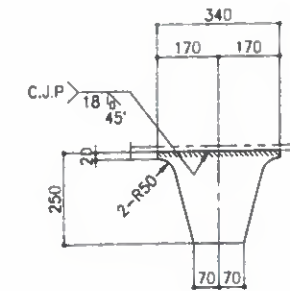
ON SCALE



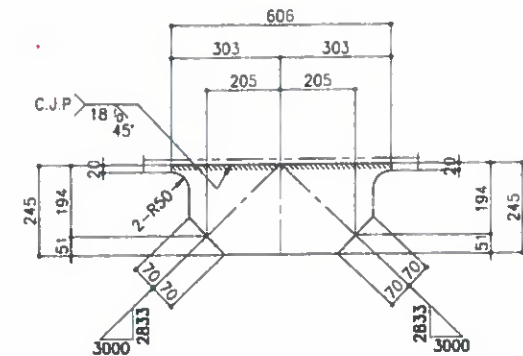
"PL20-UGP01A" DETAIL



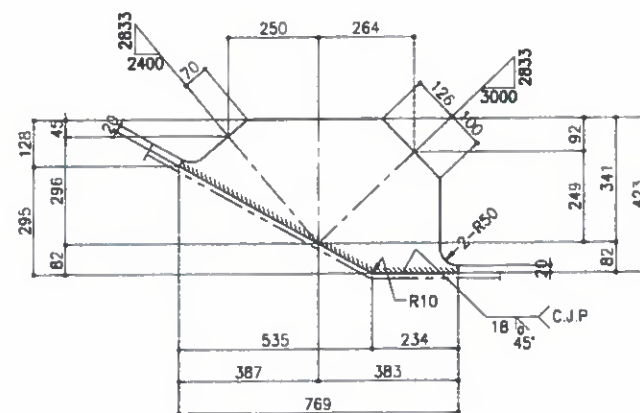
"PL20-UGP01B" DETAIL



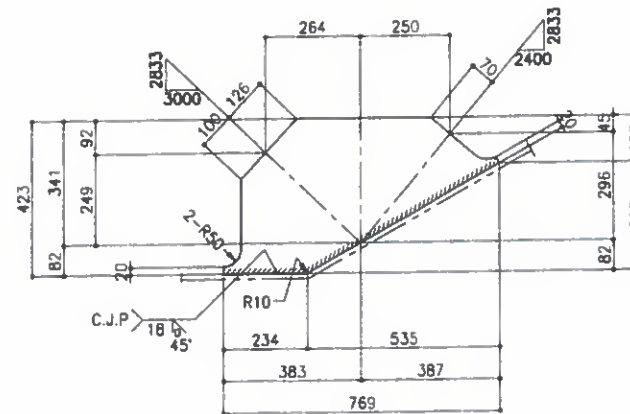
"PL20-UGP01C" DETAIL



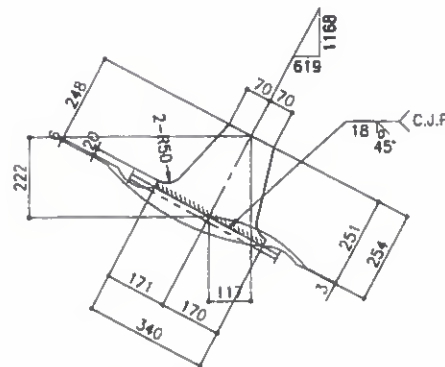
"PL20-UGP01D" DETAIL



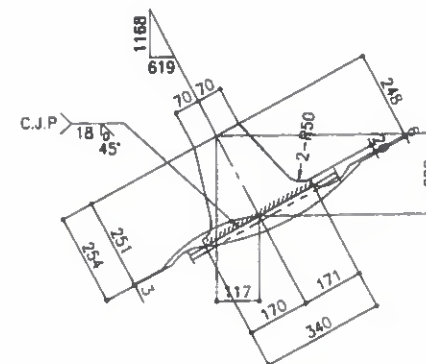
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

Refer To Comments on same drawing
number under Submittal
RA140-32-BRG-CW-DW-92120-A1

HYUNDAI E&S
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D01" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-SEC-003

REV.
A

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 30, O= 10 mm UNLESS NOTED
 3. ALL FILLET WELD : $\frac{1}{4}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
D02	<DIAPHRAGM>	ONE				
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL02D	PL 18*474	5937	1	398	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU02DA	PL 18*470	5091	1	338	A709M Gr.345	
BWU02DB	PL 18*470	5091	1	338	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU02DA	PL 18*1446	1575	1	322	A709M Gr.345	
BWU02DB	PL 18*1446	1575	1	322	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2842	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL02A	PL 10*200	542	2	17	A709M Gr.345	
VSL02B	PL 10*200	542	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				5030		

FOR CONSTRUCTION

Date: 27/02/16 Signature: M.J. LEE

On hold
28-12-2015

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D02" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.L.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

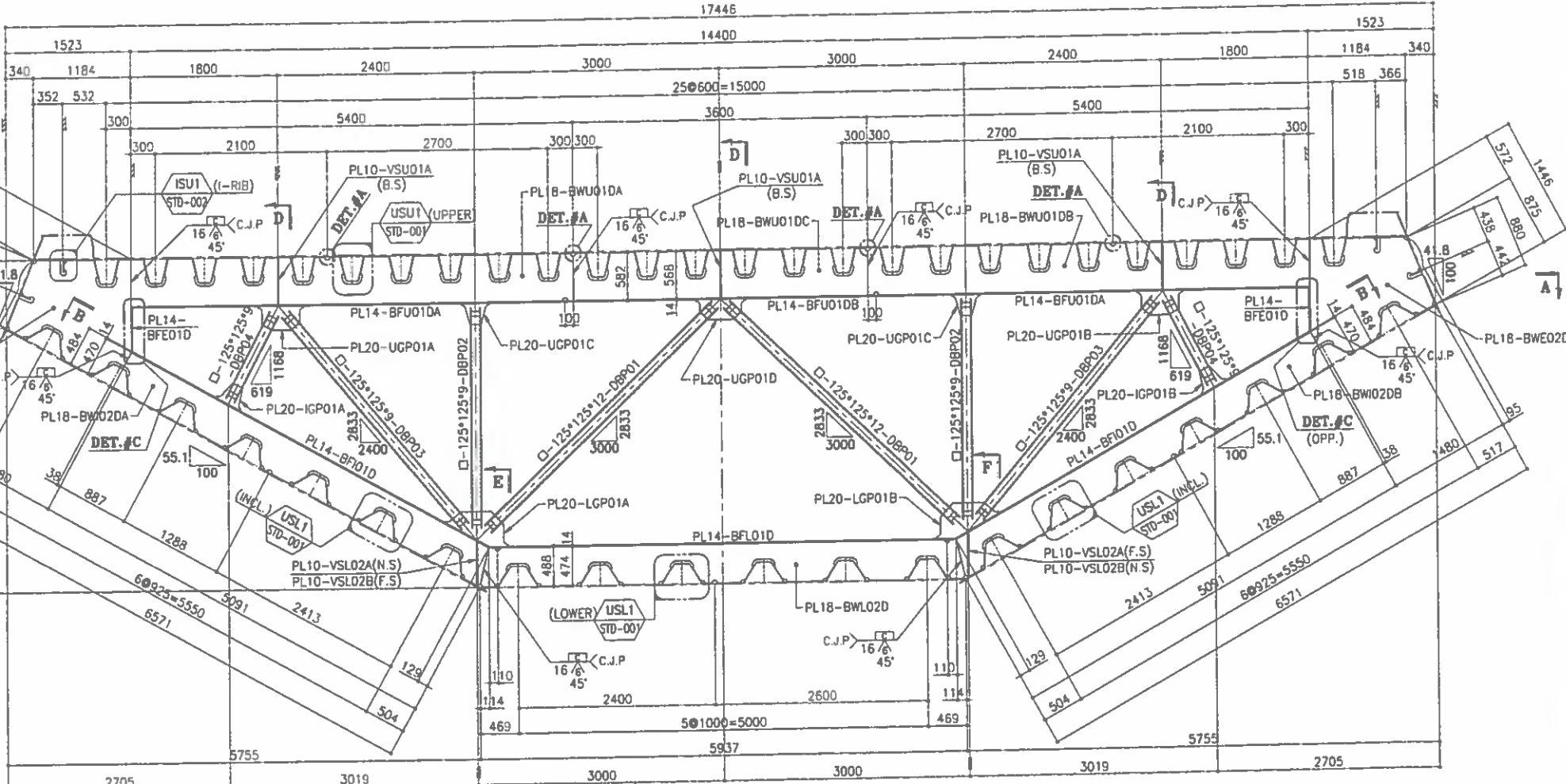
DRAWING NO.
RA140-22-BRG-SD-SEC-004

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

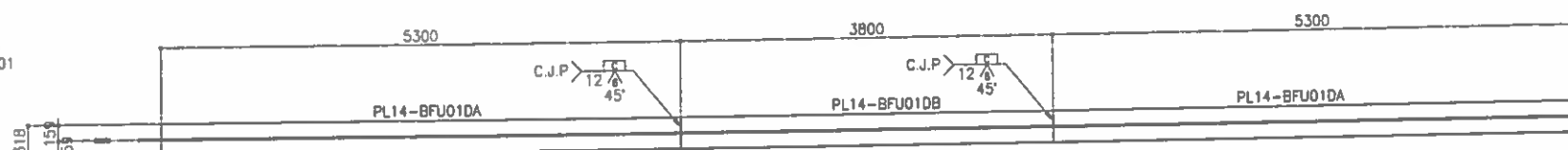
NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , R= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

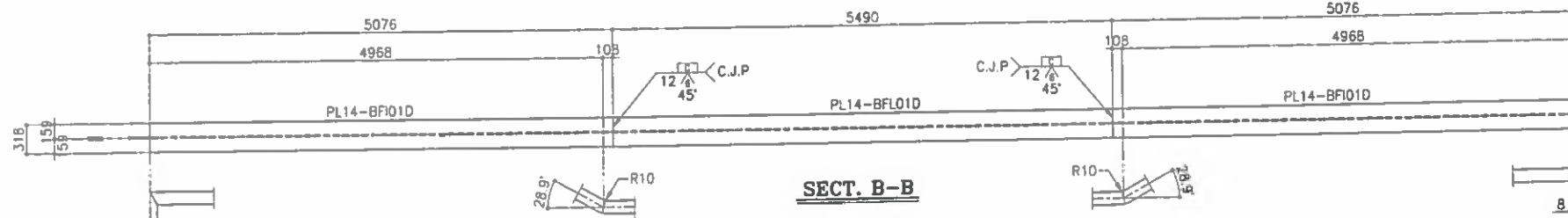
SECTION D02



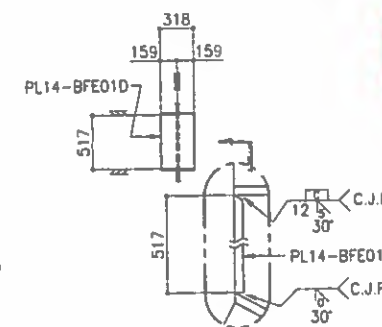
SECT. A-A



SECT. B-B



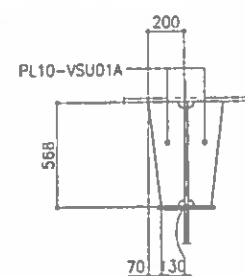
DET. #C



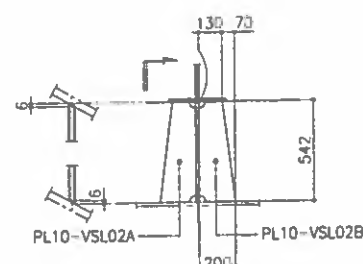
REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

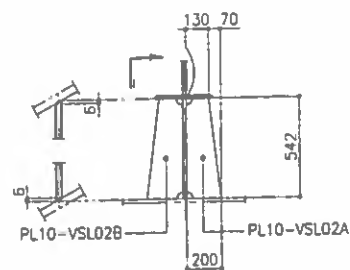
ON SCALE



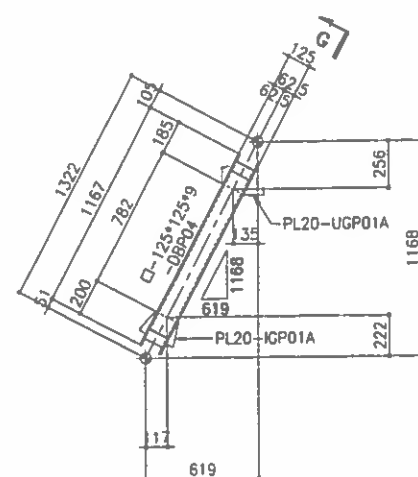
SECT. D



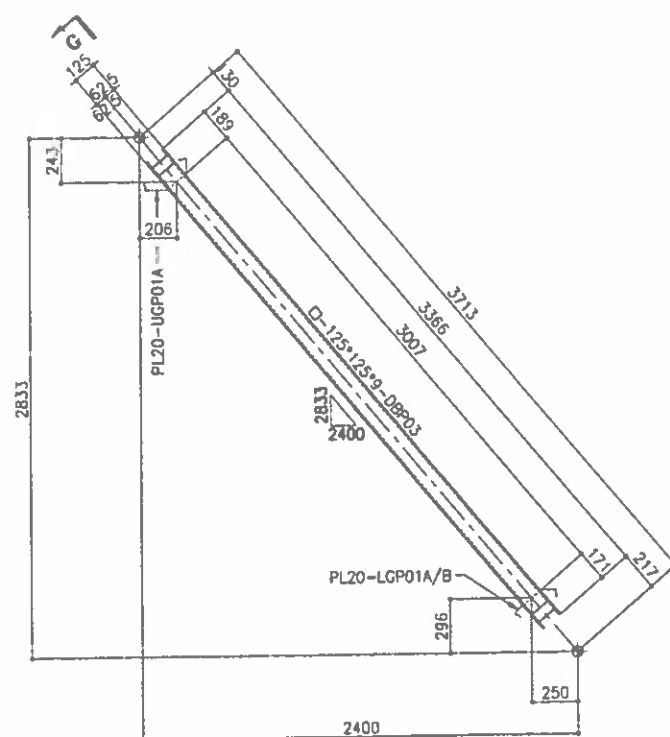
SECT. E



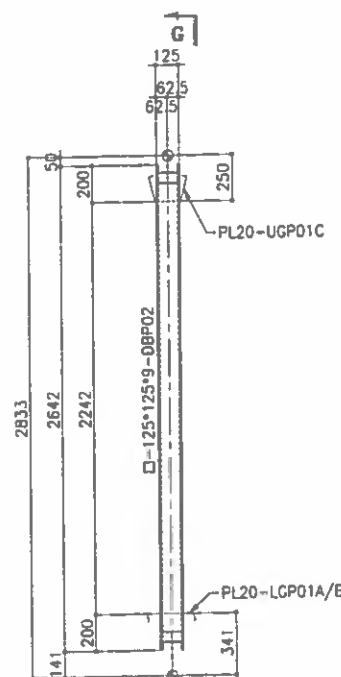
SECT. F



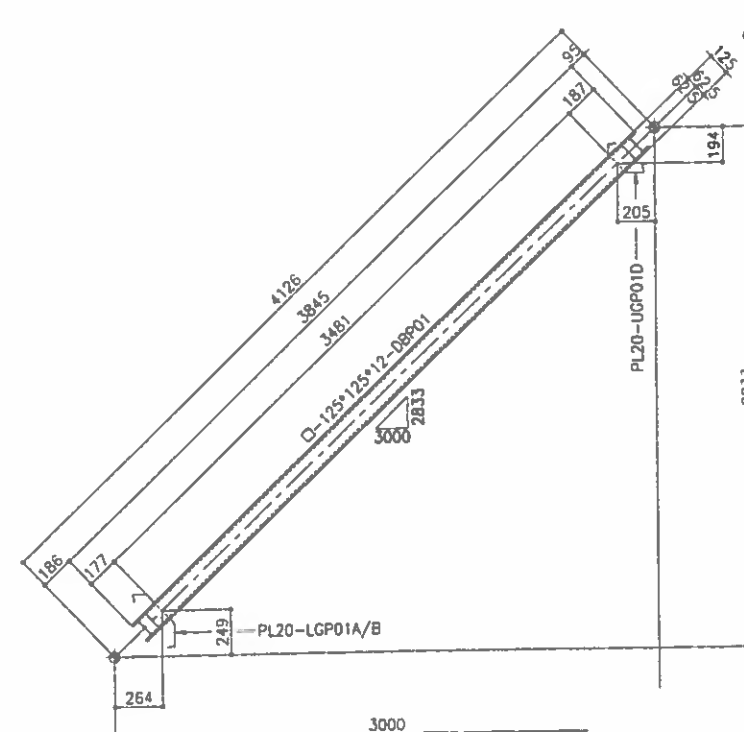
"DBP04" DETAIL
(□ - 125*125*9) (2REQ'D)



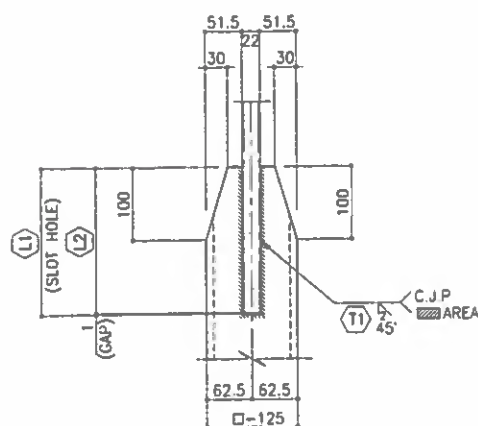
"DBP03" DETAIL
(□ - 125*125*9) (2REQ'D)



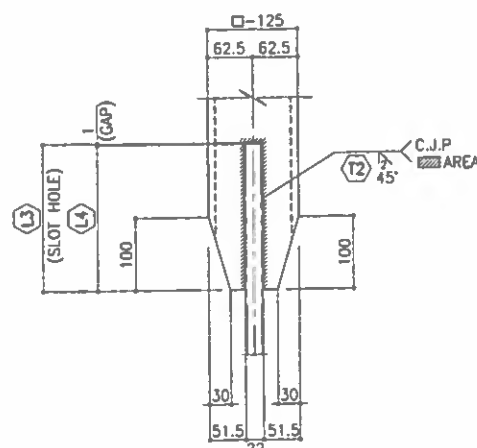
"DBP02" DETAIL
(□ - 125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ - 125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, O= 10 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

On hold

HYUNDAI E&S GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

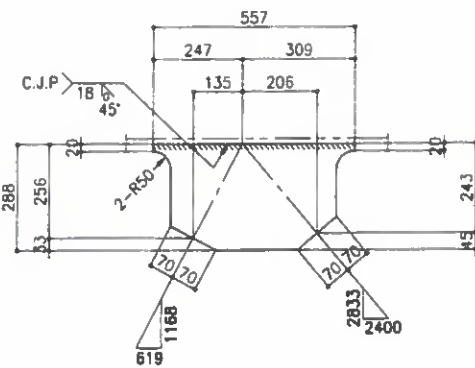
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D02" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.L.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

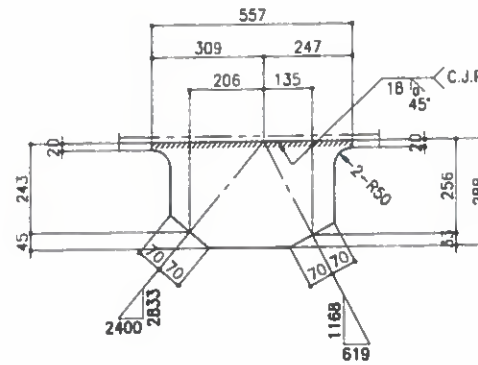
CONTRACTOR
HYUNDAI E&S GROUP
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-005
REV.
A

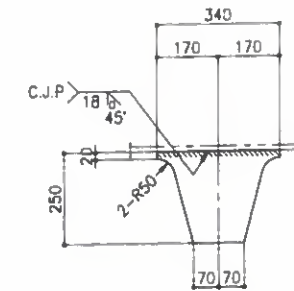
ON SCALE



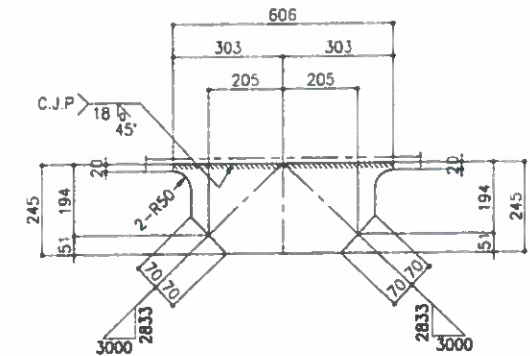
"PL20-UGP01A" DETAIL



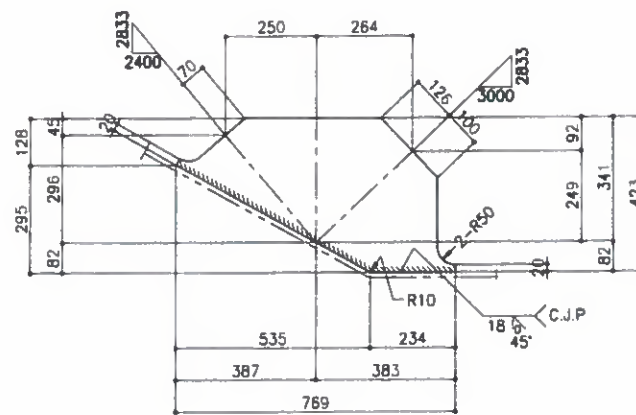
"PL20-UGP01B" DETAIL



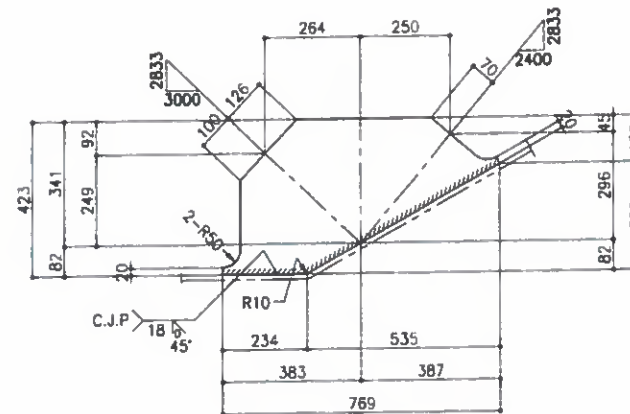
"PL20-UGP01C" DETAIL



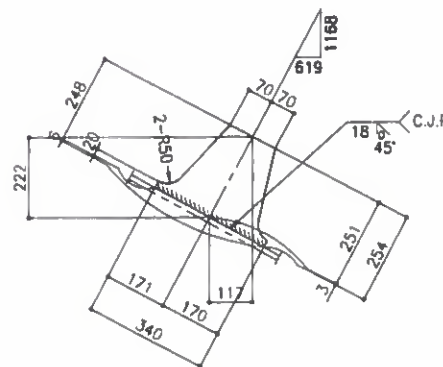
"PL20-UGP01D" DETAIL



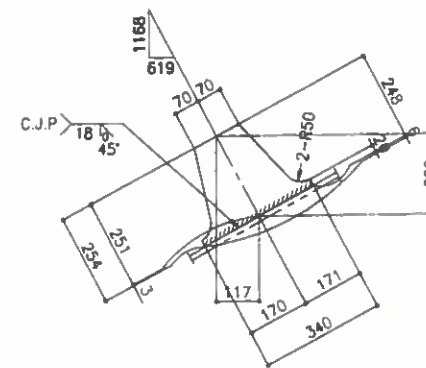
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 30, C= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



A		2016.02.25		FOR APPROVAL		H.J.PARK		S.S.SON		S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION				DRAWN	CHEC.	APPRO.			
EMPLOYER											
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION											
PROJECT TITLE											
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140											
DRAWING TITLE											
MAIN BRIDGE STEEL DECK SECTION DETAIL "D02" (3)											
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED							
1 : 10	H.J.PARK	K.W.CHON	S.S.SON	S.M.KHON							
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25							
CONTRACTOR											
HYUNDAI ENGINEERING & CONSTRUCTION											
Combined Group Contracting Company											
DRAWING NO.										REV.	
RA140-22-BRG-SD-SEC-006										A	

Refer To comments on same drawing No. under submittal
RA140-32-BRG-CW-DW-92130-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D03	<DIAPHRAGM>	-	CNE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	269	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWU03DA	PL 18*474	5960	1	399	A709M Gr.345	
BWU03DB	PL 14*318	5490	1	192	A709M Gr.345	
BWU03DA	PL 18*472	5079	1	339	A709M Gr.345	
BWU03DB	PL 18*472	5079	1	339	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BWE01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2842	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL01A	PL 10*200	545	2	17	A709M Gr.345	
VSL01B	PL 10*200	545	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				5034		

FOR CONSTRUCTION

Date: 27/02/16 Signature: H.J. LEE

92120 → 2015-12-28
92130 → 2016-01-15

SECTION D03

SECT. A-A

SECT. B-B

DET. #C

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, O=10 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE BORE

FOR APPROVAL
2016.02.25

HYUNDAI E&S
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

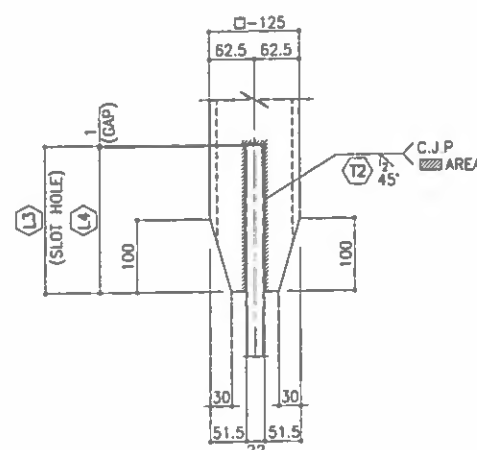
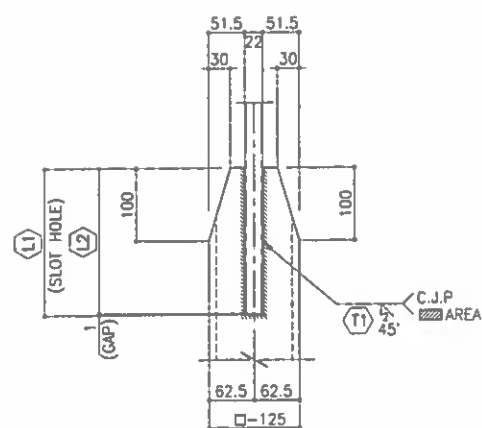
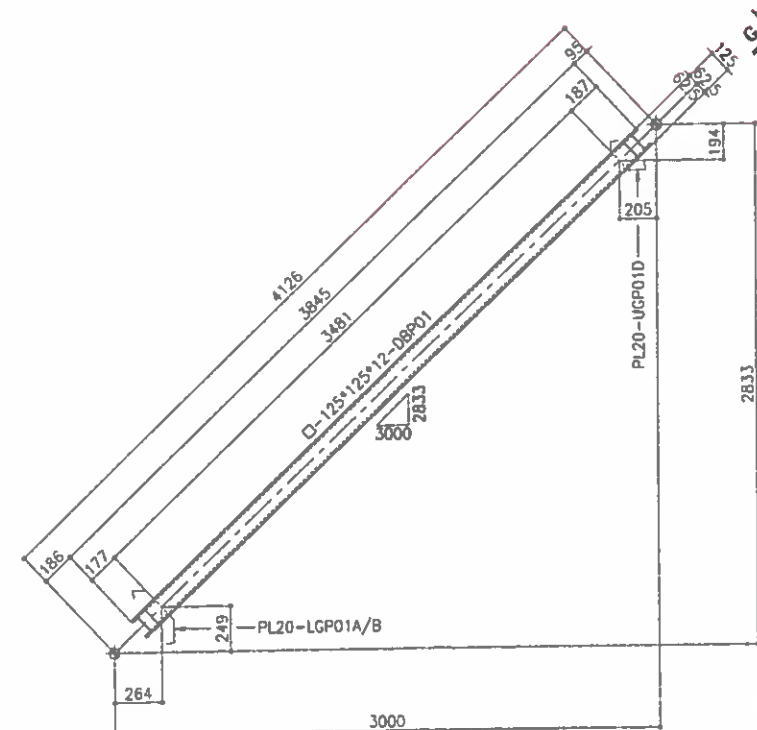
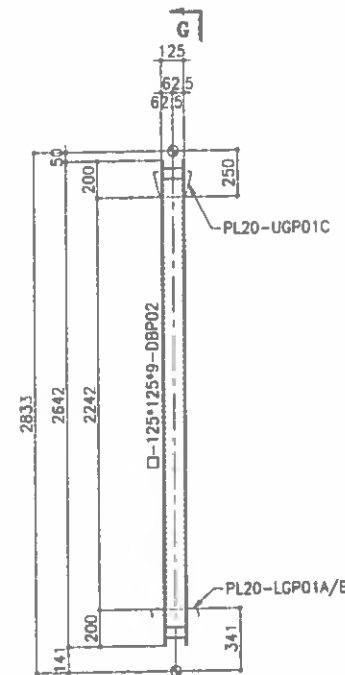
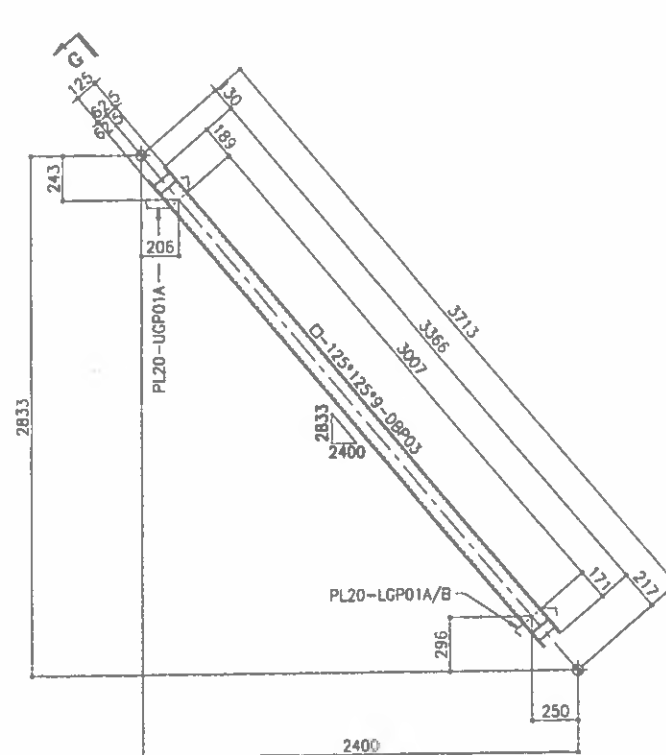
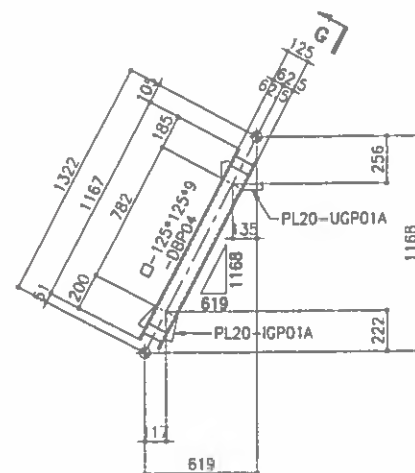
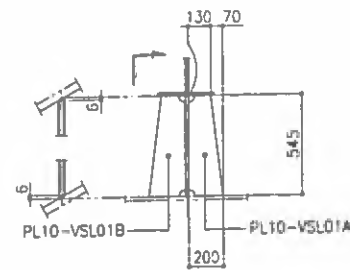
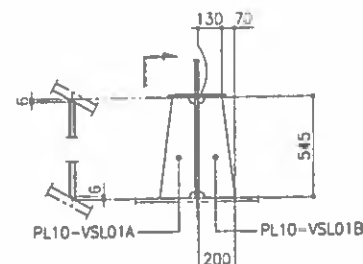
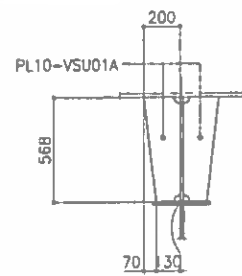
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D03" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group Contracting Company

DRAWING NO.
RA140-22-BRG-SD-SEC-007
REV.
A

Refer To Comments on Drawing
SD-SEC-007-A



MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

- NOTES**
1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP R = 35 , ϕ = 10 = UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

A		2016.02.23		FOR APPROVAL		H.I.PARK	
REV.		DATE		DESCRIPTION OF REVISION		DRAWN	
						CHECK.	
						APPROD.	

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D03" (2)

SCALE	DRAWN	DES'G'NED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHOI	S.S.SONE	S.M.KHON
2016.02.23	2016.02.23	2016.02.23	2016.02.23	2016.02.23

CONTRACTOR





DRAWING NO.

RA140-22-BRG-SD-SEC-008

REV.

A

Refer To Comments on Drawing
SD-SEC-007-A

A	2016-02-25	FOR APPROVAL	H. PARKER	S.S. SCHOFER	S. MUSA
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROVED

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "D03" (3)

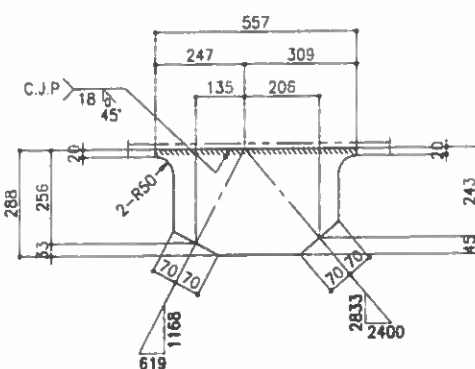
CONTRACTOR				
-------------------	--	--	--	--

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-009	

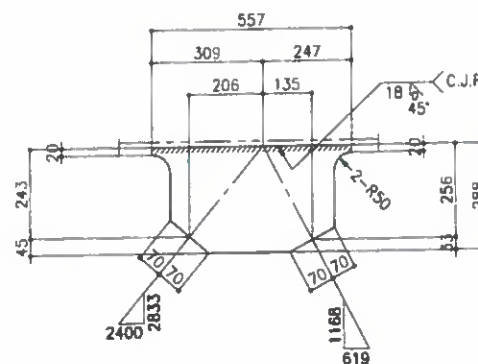
1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 36 , C= 10 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&
YOULCHON

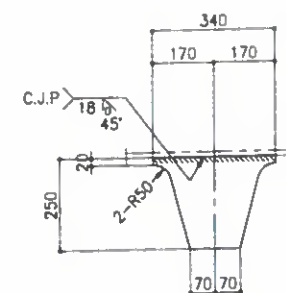
ON SCALE



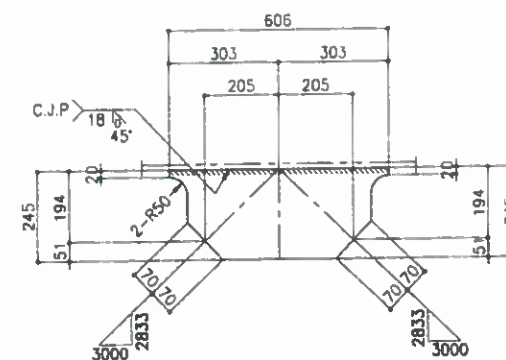
"PL20-UGP01A" DETAIL



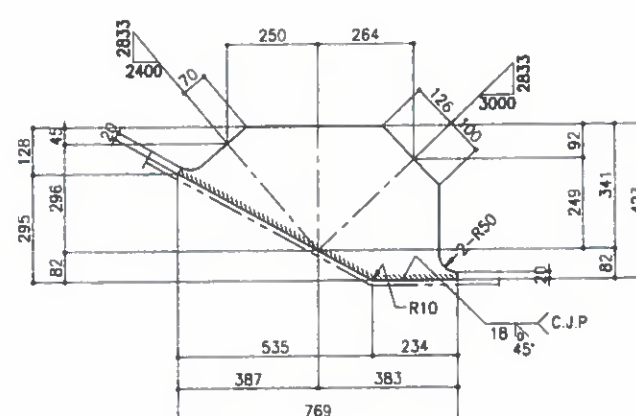
"PL20-UGP01B" DETAIL



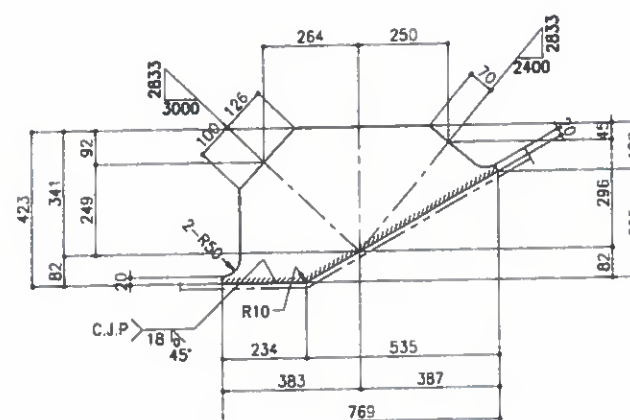
"PL20-UGP01C" DETAIL



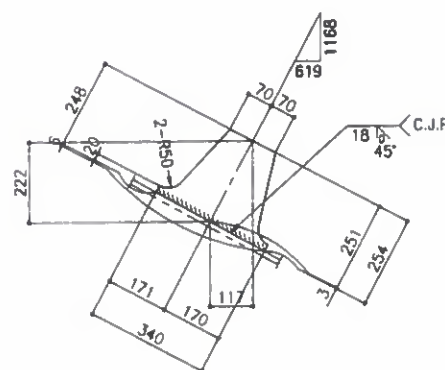
"PL20-UGP01D" DETAIL



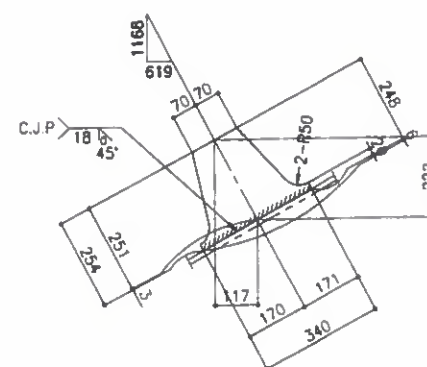
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

21.
Q2130 → 2016-01-15
Q2170 → 2015-12-28

HYUNDAI E&S
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

On hold

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SONG	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D04" (3)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.J.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S CONSTRUCTION
Combined Group
Engineering & Construction

DRAWING NO.
RA140-22-BRG-SD-SEC-012

REV.
A

- NOTES**
1. MATERIALS SEE B.O.B. UNLESS NOTED
 2. SLOPE 1/35, Or 1/30 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

**FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON**

Refer To Comments on Drw. SD-SEC-007-A

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D05	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWU05DA	PL 18*458	5946	1	385	A709M Gr.345	
BWU05DB	PL 18*458	5490	1	192	A709M Gr.345	
BWU05DC	PL 18*458	5080	1	329	A709M Gr.345	
BFU05DA	PL 14*318	5080	1	329	A709M Gr.345	
BFU05DB	PL 14*318	5076	2	355	A709M Gr.345	
BWU05DA	PL 18*1434	1564	1	317	A709M Gr.345	
BWU05DB	PL 18*1434	1564	1	317	A709M Gr.345	
BFU05DA	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
LGP01A	PL 20*254	340	1	14	A709M Gr.345	
LGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL05A	PL 10*200	529	2	17	A709M Gr.345	
VSL05B	PL 10*200	529	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				4988		

SECTION D05

SECT. A-A

SECT. B-B

92120
2015-12-28

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

92130
2016-01-15

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, Ø=10 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D05" (1)

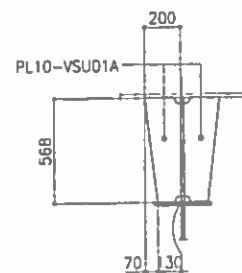
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

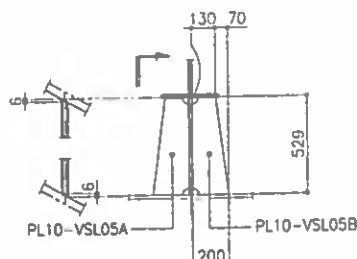
DRAWING NO.
RA140-22-BRG-SD-SEC-013
REV. A

ON SCALE

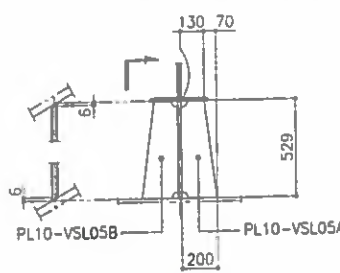
Refer To Comments on DRW. SD-SEC-007-A



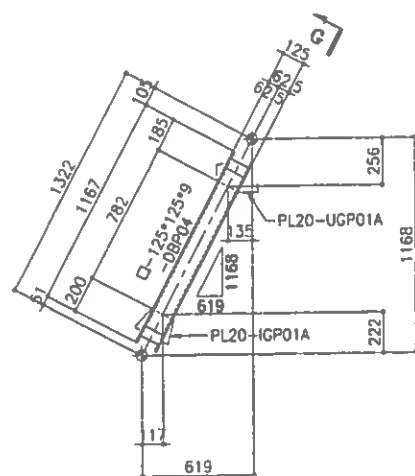
SECT. D



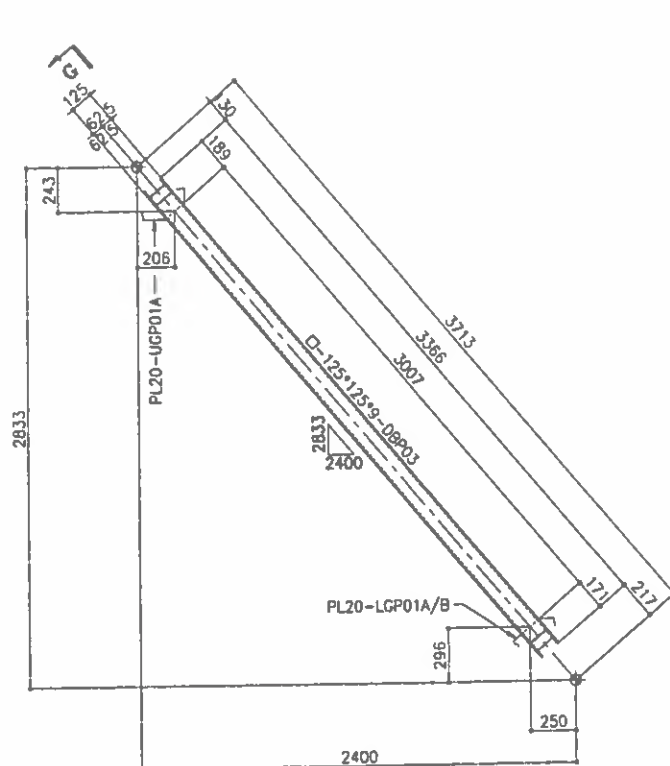
SECT. E



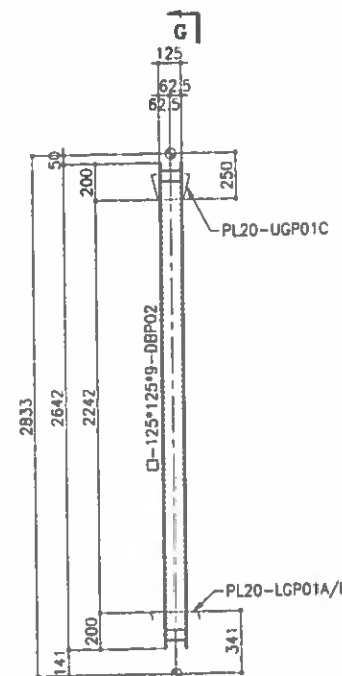
SECT. F



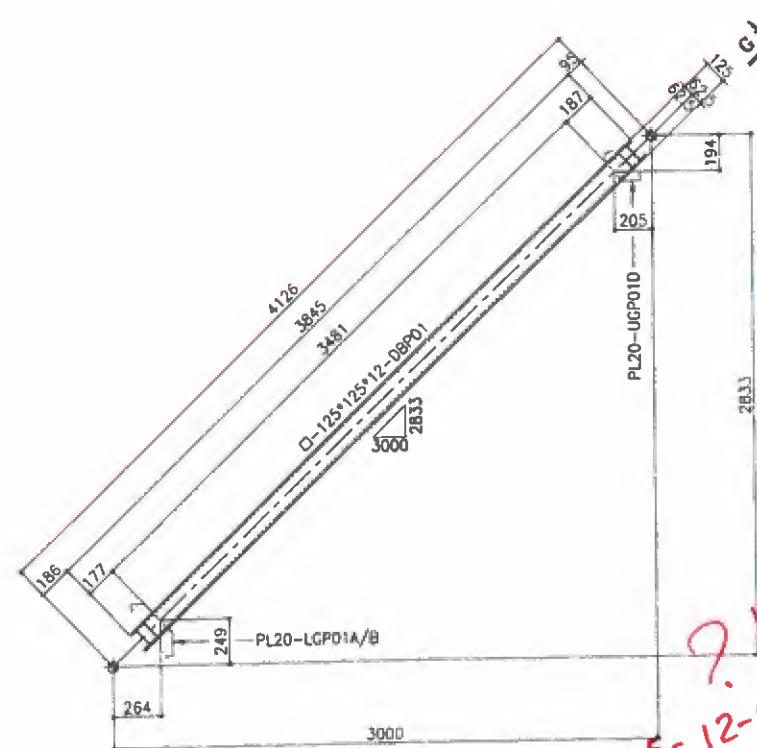
"DBP04" DETAIL
(□ - 125*125*9) (2REQ'D)



"DBP03" DETAIL
(□ - 125*125*9) (2REQ'D)



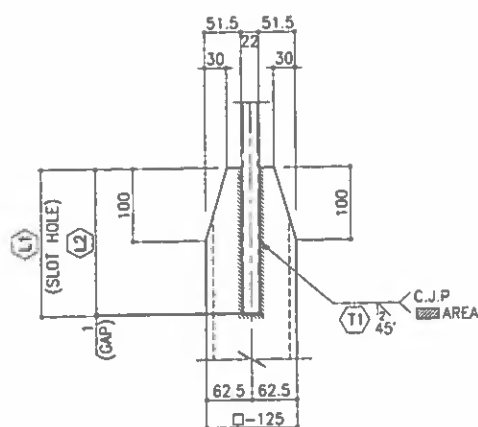
"DBP02" DETAIL
(□ - 125*125*9) (2REQ'D)



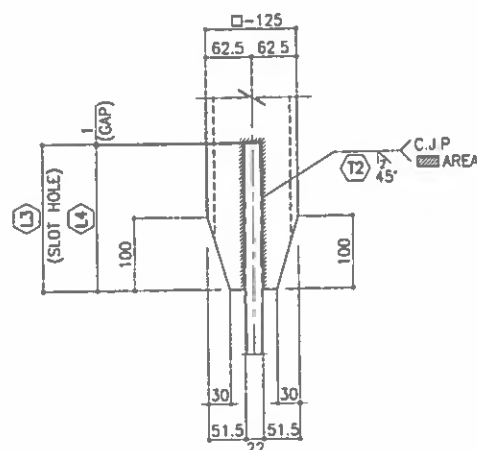
"DBP01" DETAIL
(□ - 125*125*12) (2REQ'D)

2015-12-28
2016-01-15

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35, D= 10 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

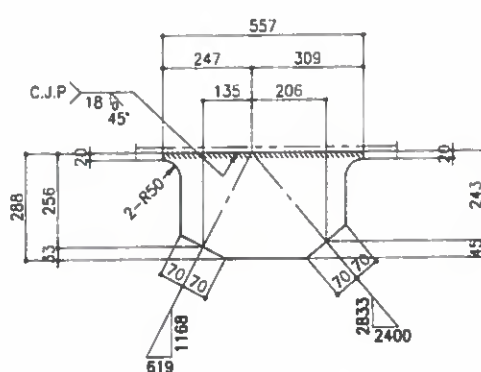
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D05" (2)

SCALE 1 : 20
DATE ISSUED 2016.02.25
DRAWN H.I. PARK
DESIGNED K.W. CHOI
CHECKED S.S. SON
APPROVED S.M. KHON

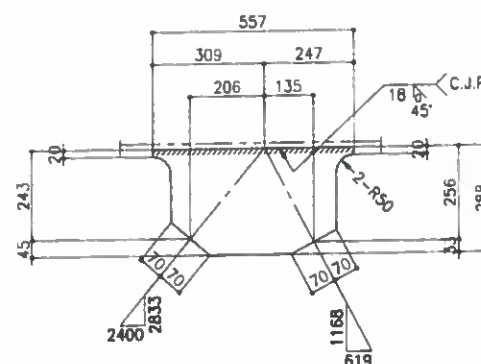
CONTRACTOR
HYUNDAI E&SI
YOULCHON

DRAWING NO. RA140-22-BRG-SD-SEC-014
REV. A

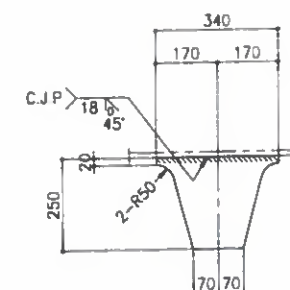
ON SCALE



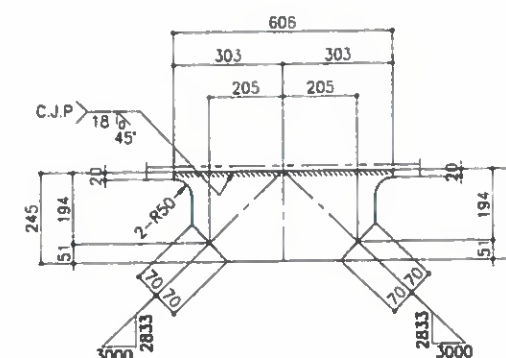
"PL20-UGP01A" DETAIL



"PL20-UGP01B" DETAIL

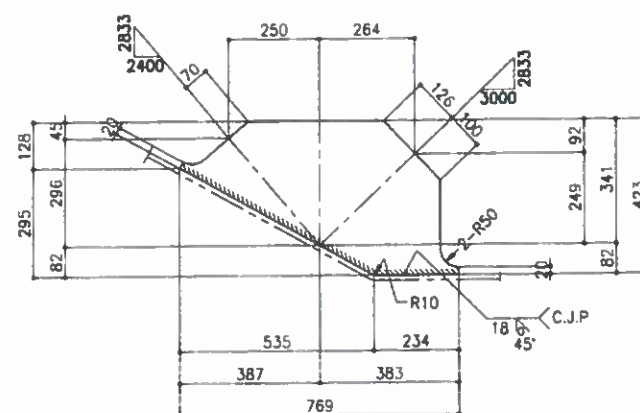


"PL20-UGP01C" DETAIL

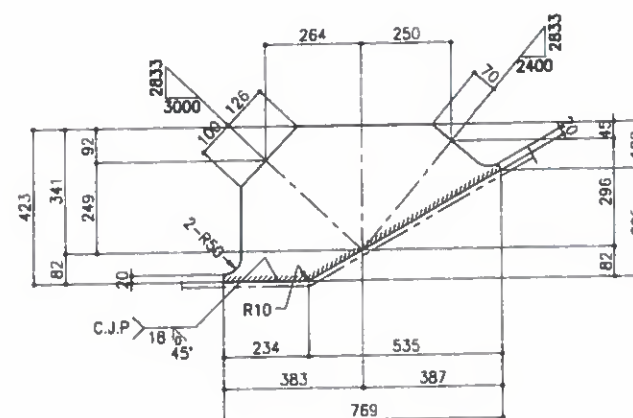


"PL20-UGP01D" DETAIL

Refer To Comments on Draw. SD-SEC-007-A

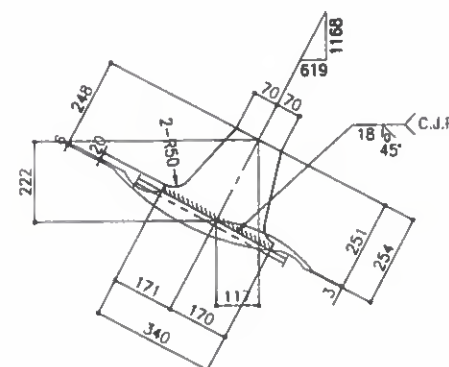


"PL20-LGP01A" DETAIL

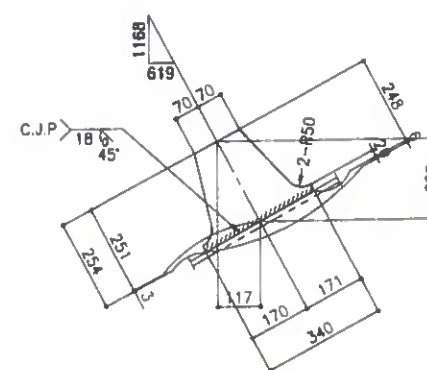


"PL20-LGP01B" DETAIL

?!
 $92120 \rightarrow 2015-12-28$
 $92130 \rightarrow 2016-01-15$



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

HYUNDAI **SK** COMBINED GROUP
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

A	REV	DATE	DESCRIPTION OF REVISION	HJ PARK DRAWN	S.S. SONG CHECK.	S.M. KIM APPROVE		

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D05" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION


Combined Group
 Contracting Company

DRAWING NO.

RA140-22-BRG-SD-SEC-015

RE

1

NOTES

1. MATERIALS SEE D.O.W. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

**FOR
APPROVAL**

2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
D06	<DIAPHRAGM>	ONE				
BWU06DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU06DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU06DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWU06D	PL 18*446	5939	1	374	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU06DA	PL 18*446	5077	1	320	A709M Gr.345	
BWU06DB	PL 18*446	5077	1	320	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE06DA	PL 18*1422	1556	1	313	A709M Gr.345	
BWE06DB	PL 18*1422	1556	1	313	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL06A	PL 10*200	515	1	8	A709M Gr.345	
VSL06B	PL 10*200	477	1	7	A709M Gr.345	
VSL06C	PL 10*200	515	1	8	A709M Gr.345	
VSL06D	PL 10*200	477	1	7	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				4949		

** sections not matching the design drawing DW-34443-B2. Also the design note No. "4" applicable for the diagonal member (14) only. Contractor to provide reference for changes.

FOR CONSTRUCTION

Date: 27/02/16 Signature: M.J. LEE

28-12-2015

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D06" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-016
REV
A

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

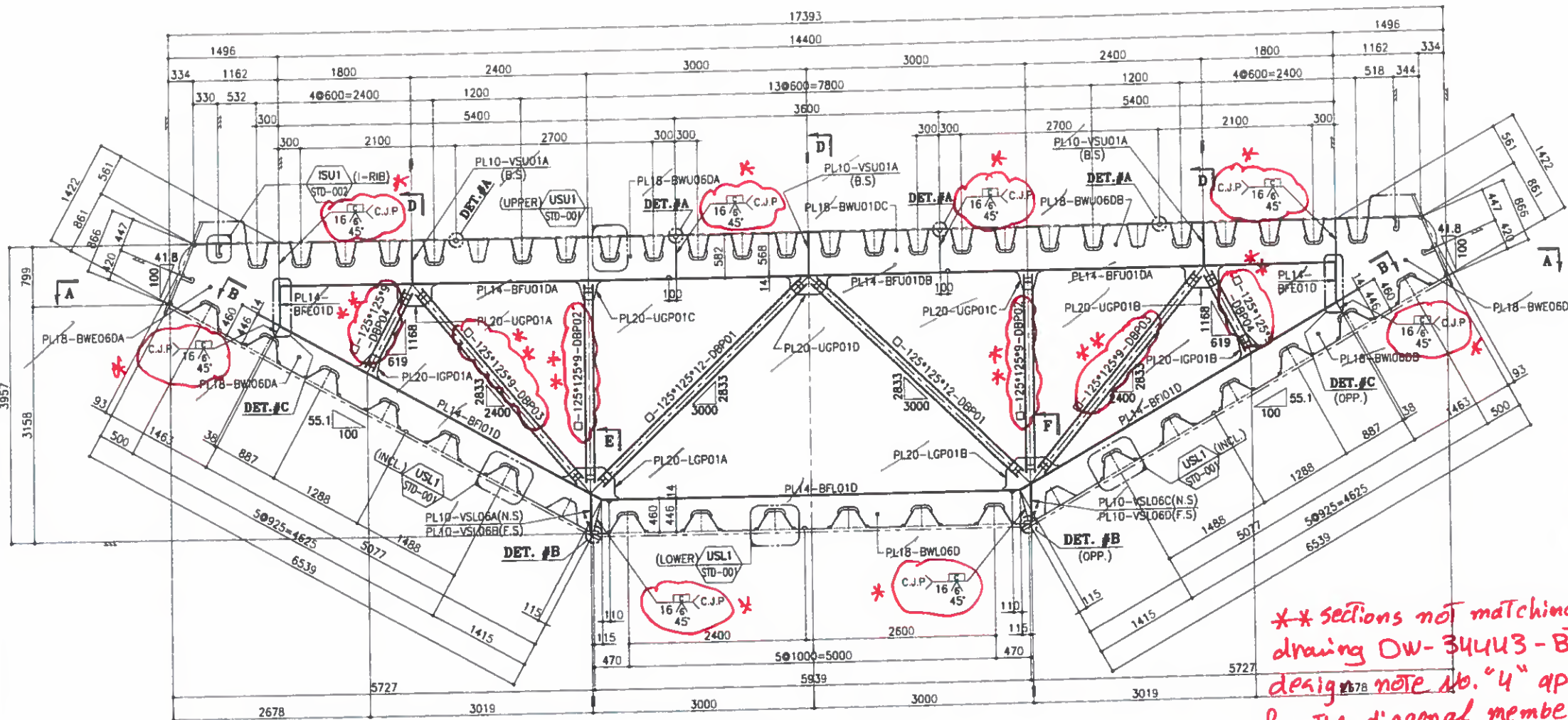
NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. GALVALAP R=36, C=10 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

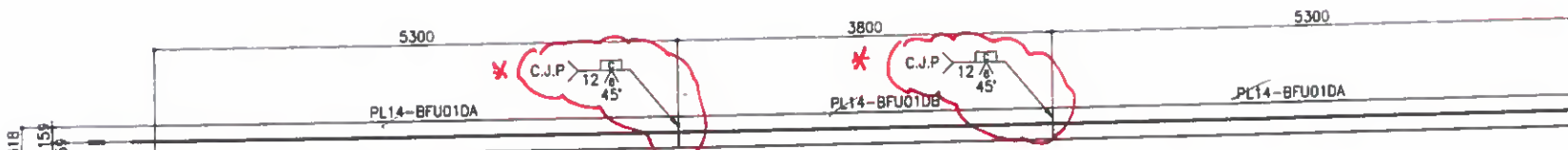
FOR APPROVAL
2016.02.25

HYUNDAI E&S
YOULCHON

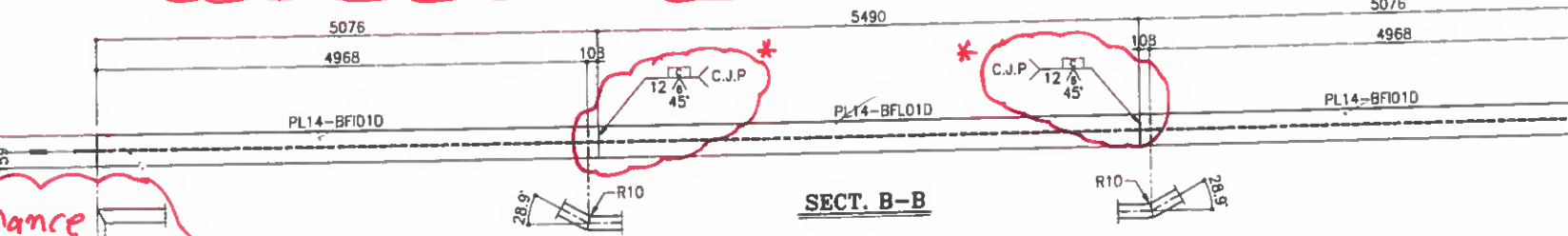
SECTION D06



SECT. A-A



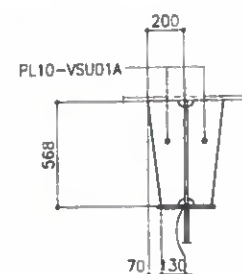
SECT. B-B



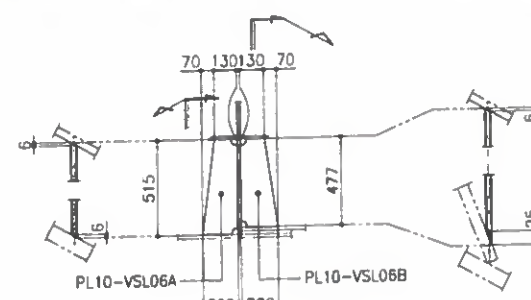
Provide approved reference

Provide reference on use same thickness of the welded parts 18mm

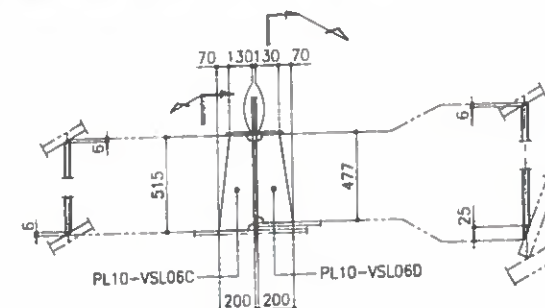
ON SCALE



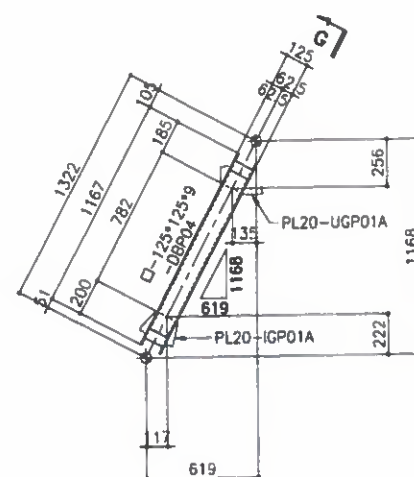
SECT. D



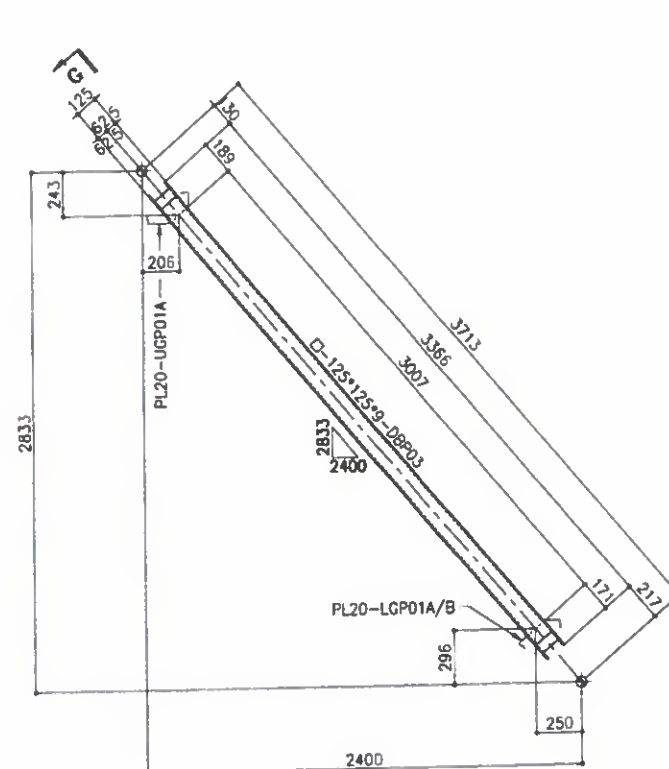
SECT. E



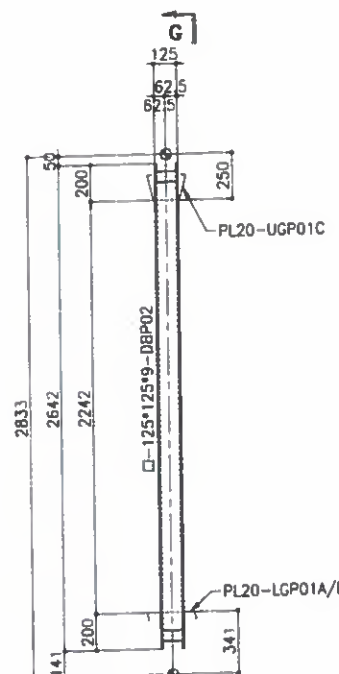
SECT. F



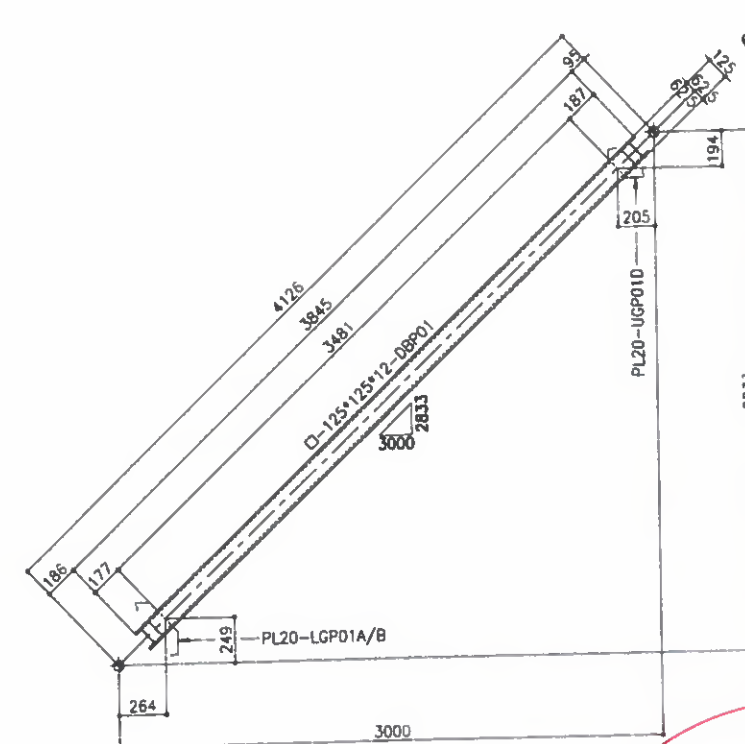
"DBP04" DETAIL
(☐ -125°125°9) (2REQ'D)



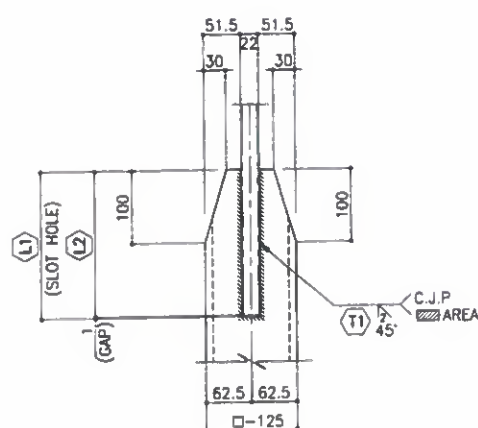
"DBP03" DETAIL
(125"125"9) (2REQ'D)



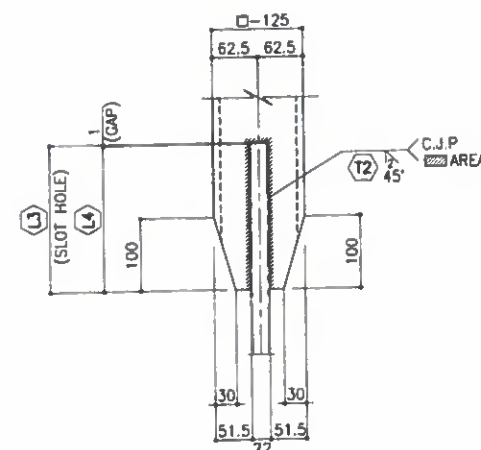
"DBP02" DETAIL
(□ -125°125°9) (2REC'D)



"DBP01" DETAIL
(□ - 125°125°12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

MARK	TOP SIDE			BOT. SIDE		
	L1	L2	T1	L3	L4	T2
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

Min length $\frac{200}{mm}$ Refer To
Design drawing CW-DW-3444-B2

- ## NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.23
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

A	2016/02/25	FOR APPROVAL	HJ PARK	S.S. SON	SALON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROVED
EMPLOYER					

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D06" (2)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVE
1 : 20	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

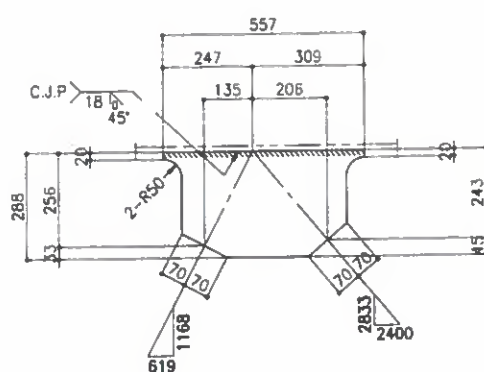
CONTRACTOR

 **HYUNDAI**
Sustainable Growth. A Promise. A Commitment.

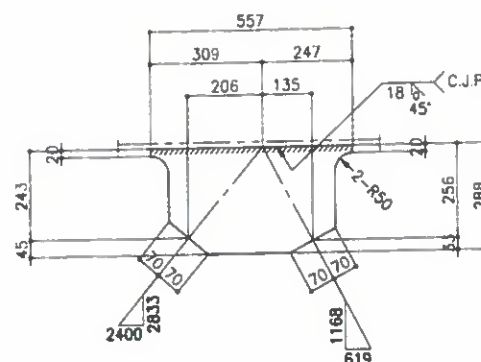
 **Combined Group**
Contracting Companies

DRAWING NO.	REV
RA140-22-BRG-SD-SEC-017	A

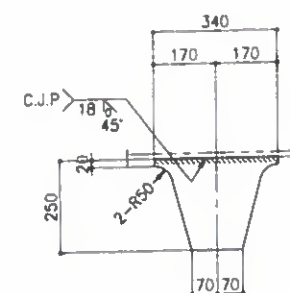
ON SCALE



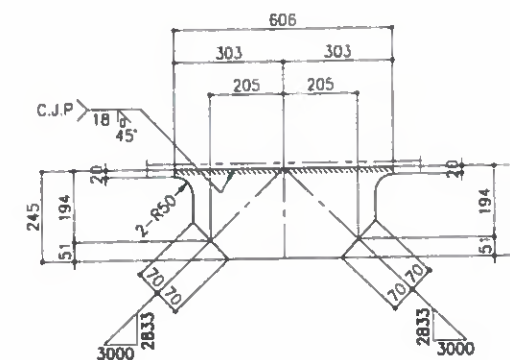
"PL20-UGP01A" DETAIL



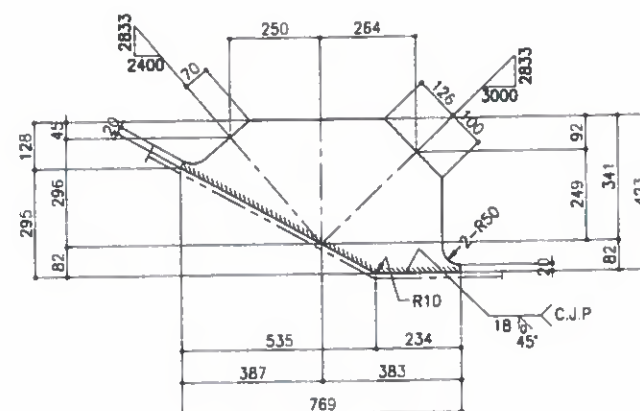
"PL20-UGP01B" DETAIL



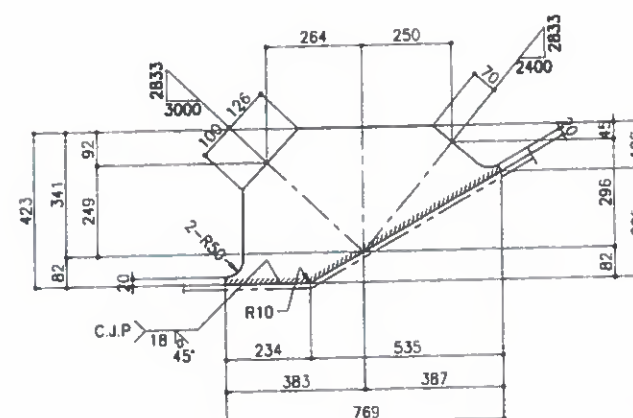
"PL20-UGP01C" DETAIL



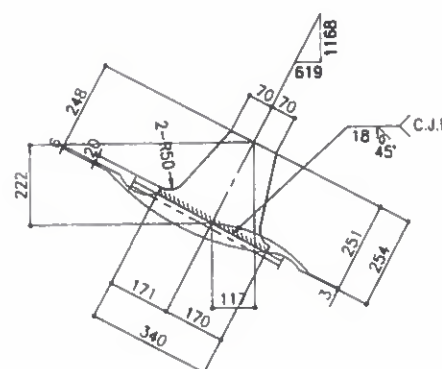
"PL20-UGP01D" DETAIL



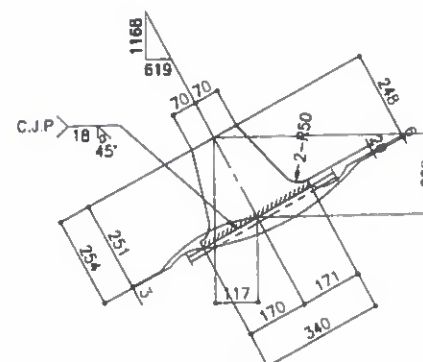
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

Refer To Comments on
Dru. # BRG-SD-SEC-016-A
& # BRG-SD-SEC-017-A

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

A	2018.04.25	FOR APPROVAL	H.LIPARI	S.S. SONG	S.M. KHORRAM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROV.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D06" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVE
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

2016.08.15
CONTRACTOR



DRAFTING NO.

RA140-22-BRG-SD-SEC-018

REV

A

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , D= 10 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To comments on The same drawing no. under
Submittal RA140-32-BRG-CW-DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D07	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL07D	PL 18*474	5946	1	398	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU07DA	PL 18*472	5088	1	339	A709M Gr.345	
BWU07DB	PL 18*472	5088	1	339	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BWE01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL01A	PL 10*200	545	2	17	A709M Gr.345	
VSL01B	PL 10*200	545	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				5034		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

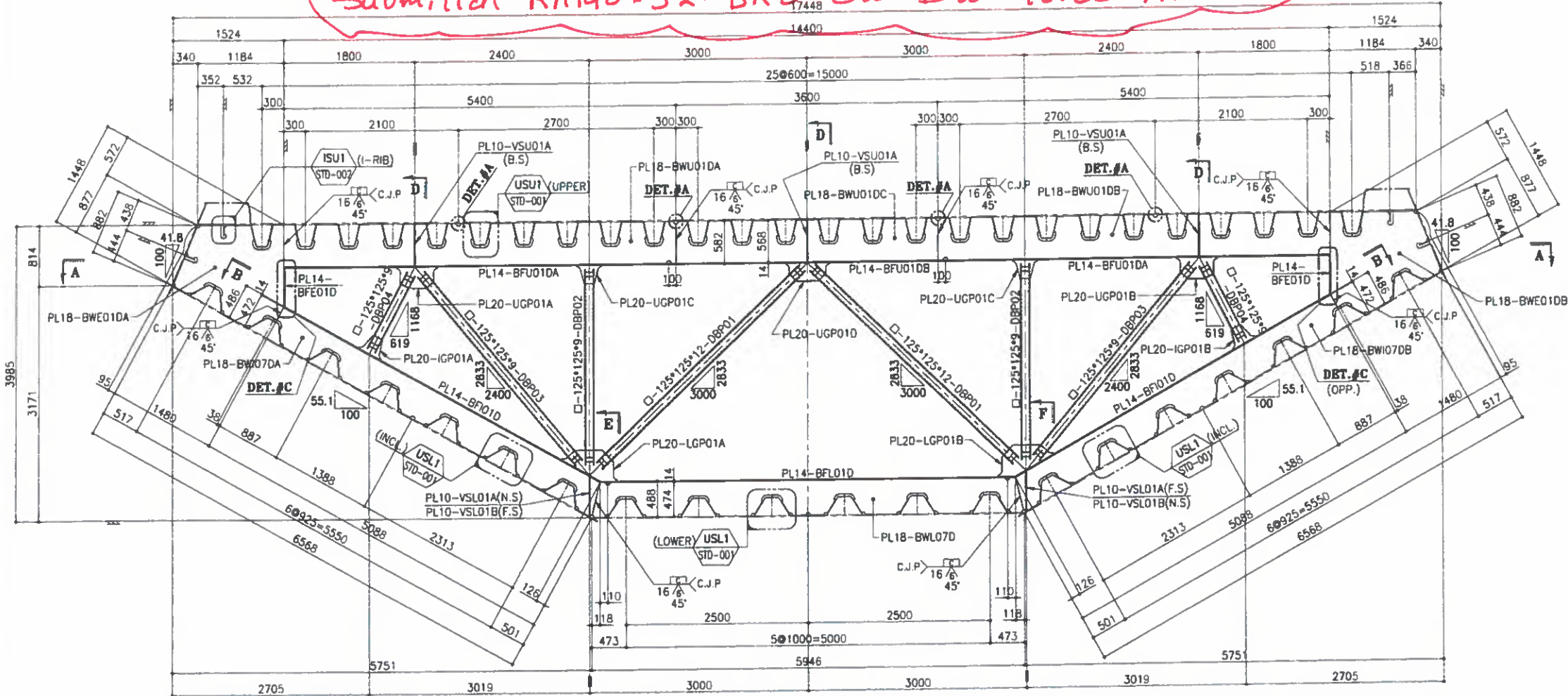
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D07" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SONH	S.M.KHONH
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

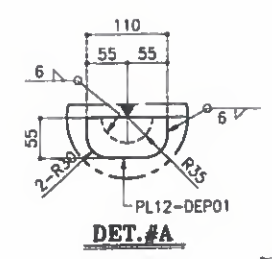
CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-SEC-019

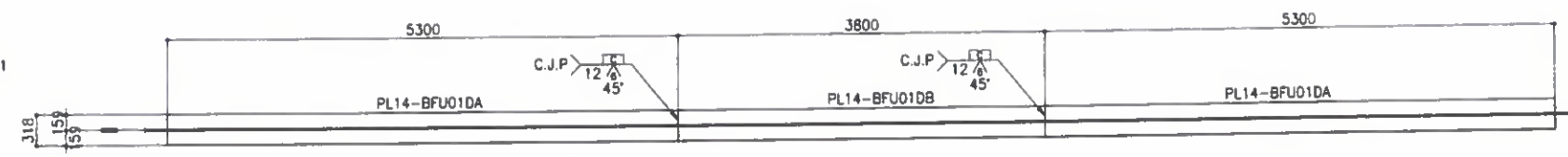
REV.
A



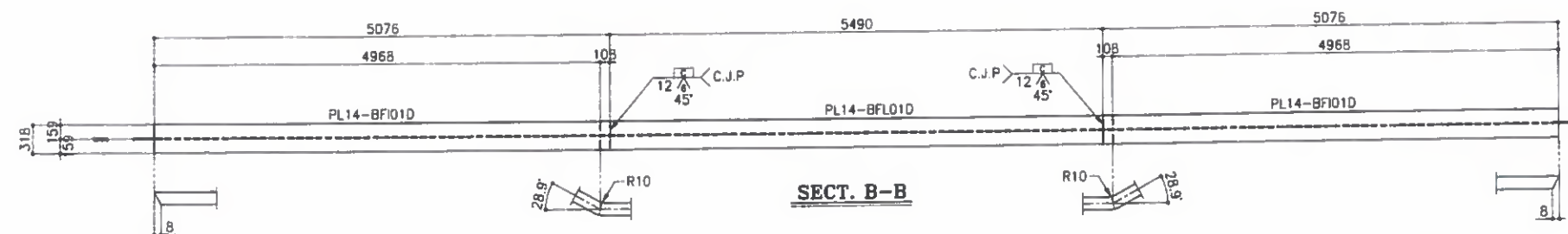
SECTION D07



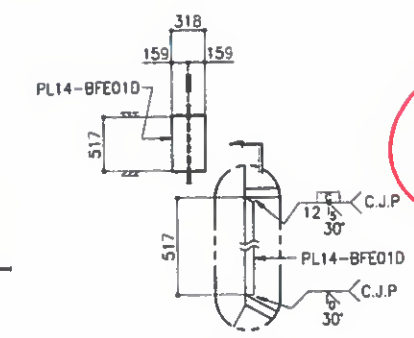
DET. #A



SECT. A-A



SECT. B-B



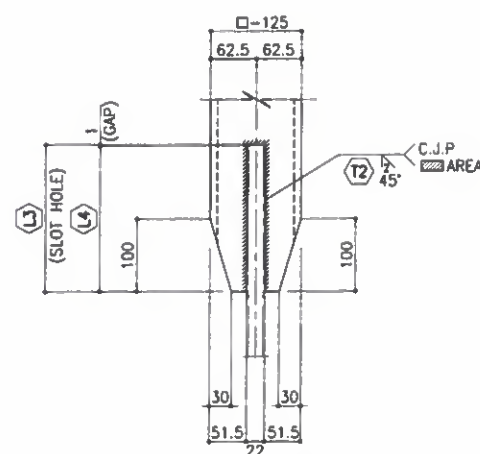
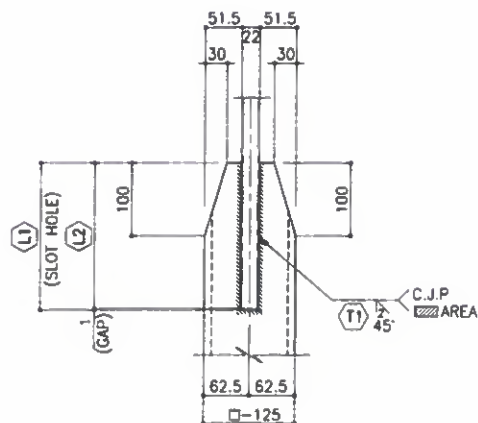
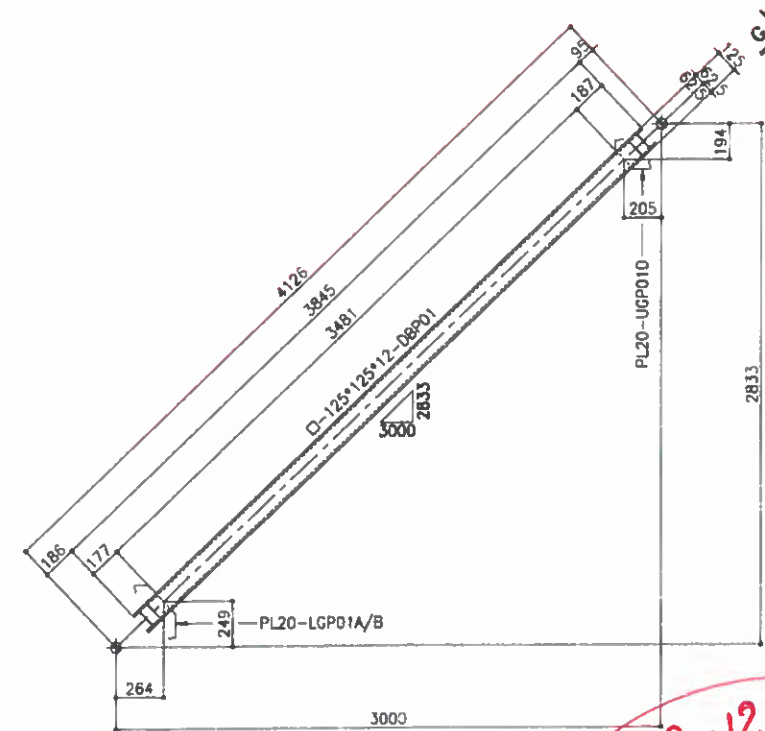
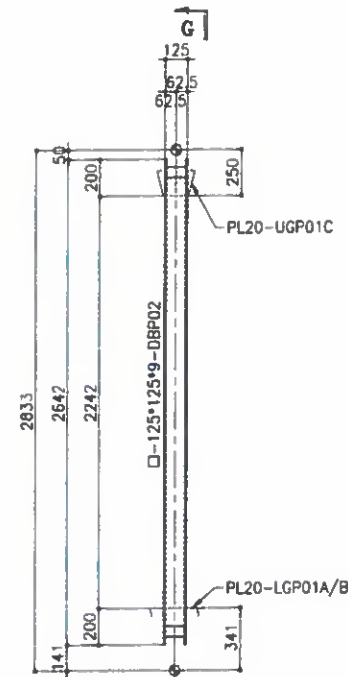
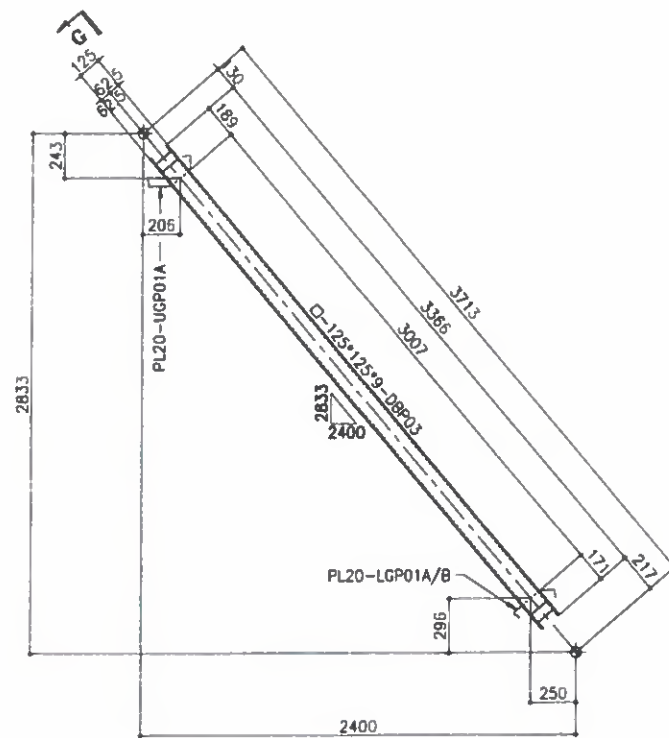
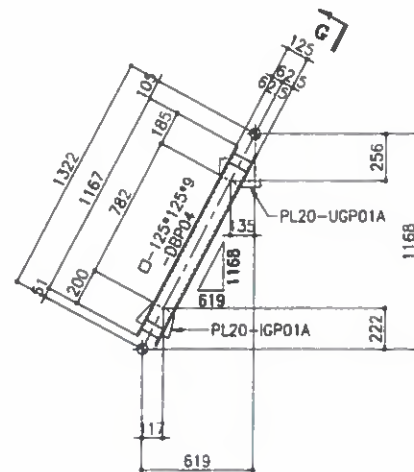
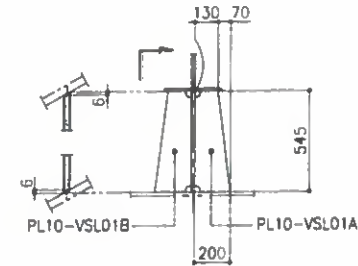
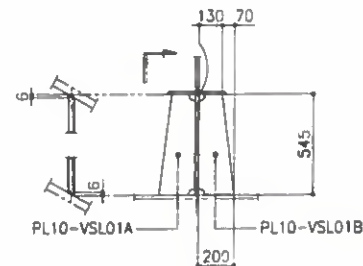
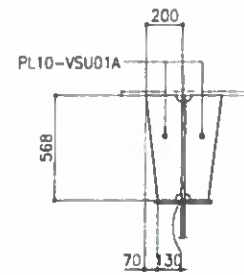
DET. #C

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To comments on The same drawing
under submittal No.
RA140-32-BRG-CW-DW-92120-A1.



MARK	TOP SIDE			BOT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP $R = .35$, $C = .10$ mm UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

28-12-2015

A	2018/05/25	FOR APPROVAL	H.J. PARK	S.S. SONOF	S.M. KIM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
EMPLOYER					

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "D07" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

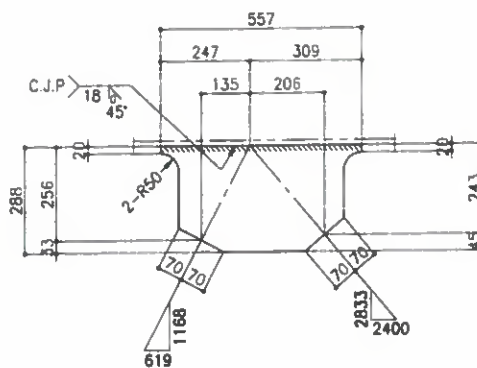
CONTRACTOR

 **HYUNDAI**
ENGINEERING & CONSTRUCTION

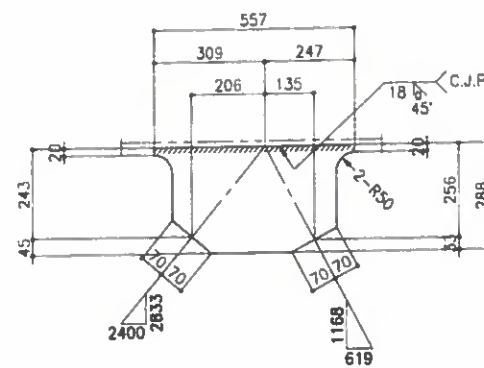
 **Combined Group**
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-020	A

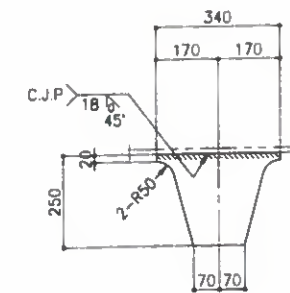
ON SCALE



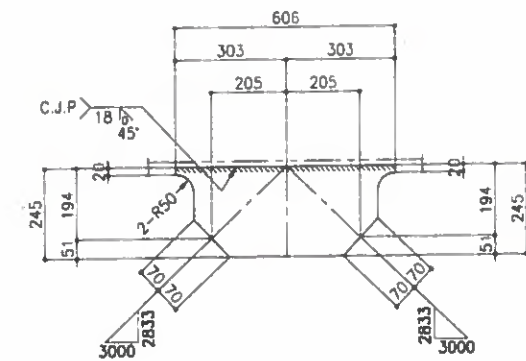
"PL20-UGP01A" DETAIL



"PL20-UGP01B" DETAIL

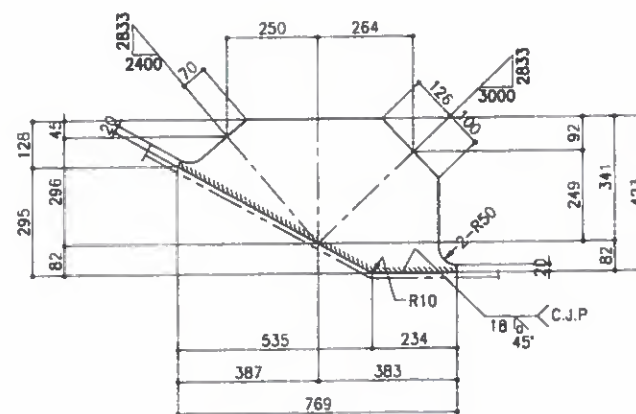


"PL2Q-UGP01C" DETAIL

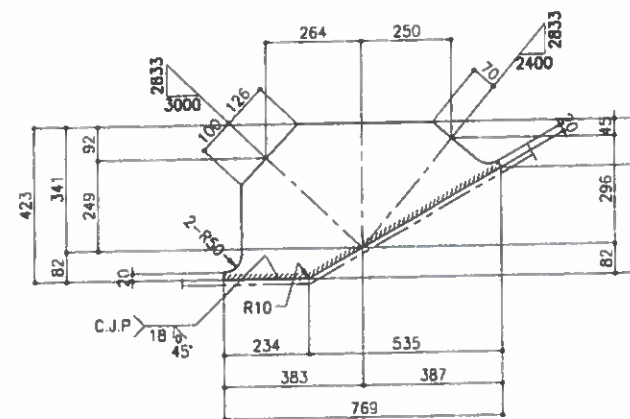


"PL20-UGP01D" DETAIL

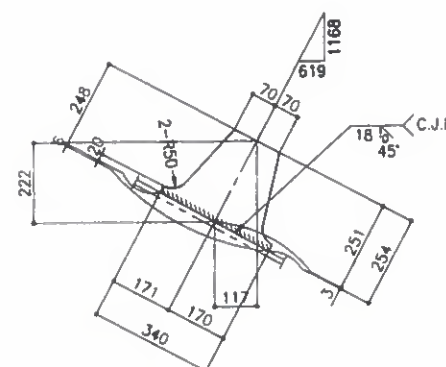
Refer To comments on The same drawing
number under submittal No.
RA140-32-BRG-CW-DW-92120-A1



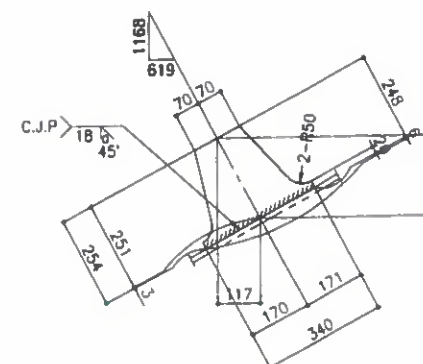
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*

28-12-2015

A	2016-07-25	FOR APPROVAL	M. PARK	S. SONG	S. KIM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
EMPLOYER					

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "D07" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARKAR	K.W. CHOI	S.S. SONI	S.M. KHORRAM
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-021	A

NOTES

1. MATERIALS SEE D.O.N. UNLESS NOTED
2. SCALLOP R= 35, O= 10 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
DDB	<DIAPHRAGM>	ONE				
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWU08DA	PL 18*472	5945	1	396	A709M Gr.345	
BFU01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU08DB	PL 18*470	5087	1	338	A709M Gr.345	
BFU01D	PL 18*470	5087	1	338	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE04DA	PL 18*1446	1573	1	321	A709M Gr.345	
BWE04DB	PL 18*1446	1573	1	321	A709M Gr.345	
BFU01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	184	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL02A	PL 10*200	542	2	17	A709M Gr.345	
VSL02B	PL 10*200	542	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				5027		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

on hold
28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
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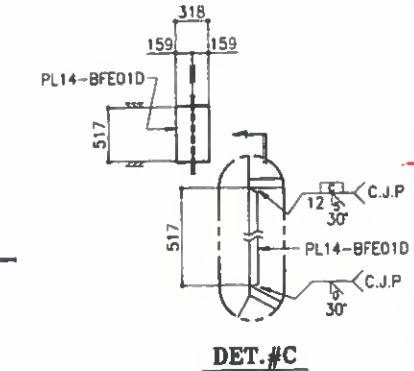
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D08" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SONH	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group
DRAWING NO.
RA140-22-BRG-SD-SEC-022



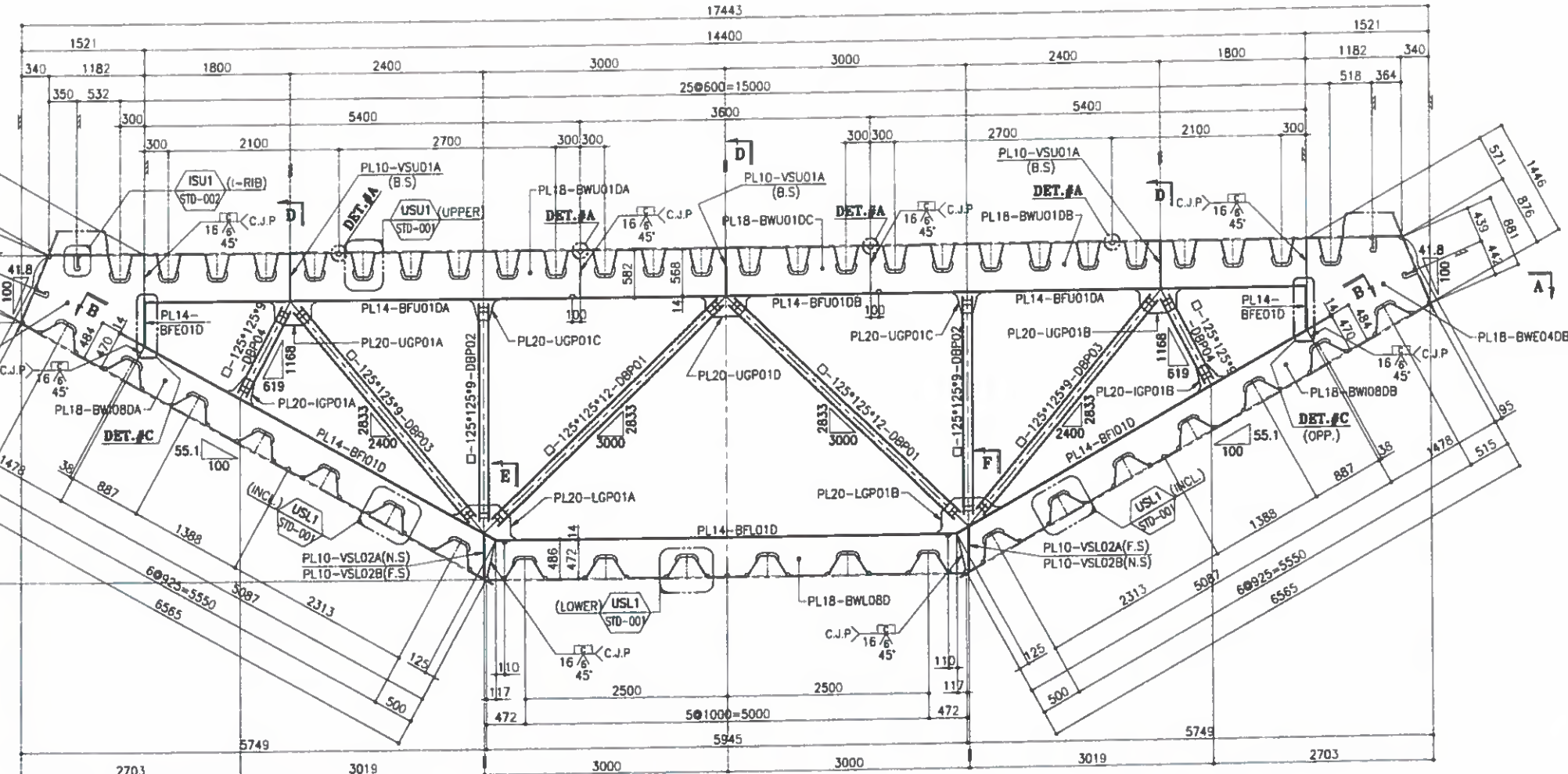
REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-SID-001
ISU1	SD-STD-002

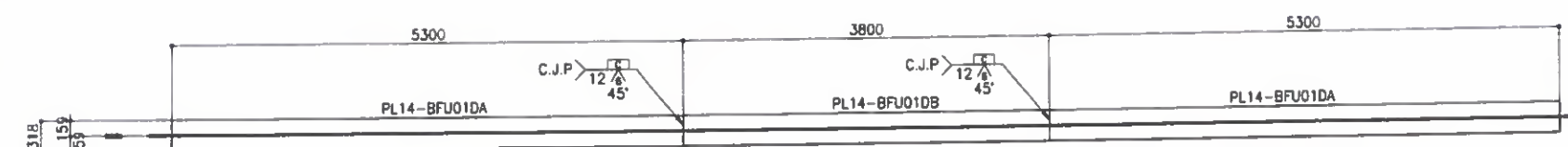
- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R=25, C=10 UNLESS NOTED
 3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

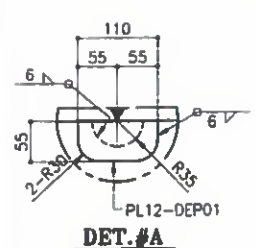
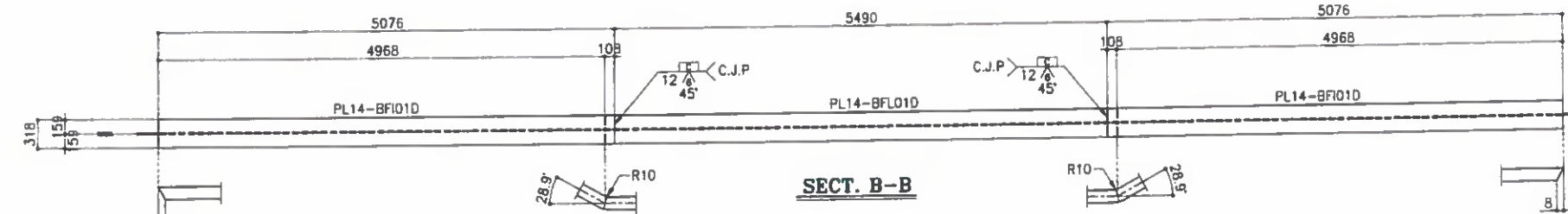
SECTION D08



SECT. A-A

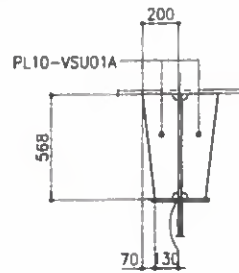


SECT. B-B

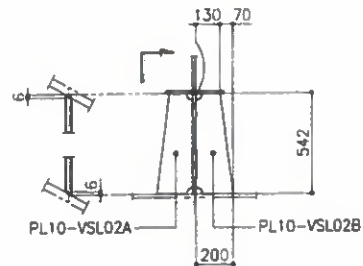


DETAIL A

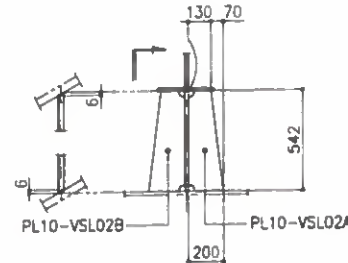
ON SCALE



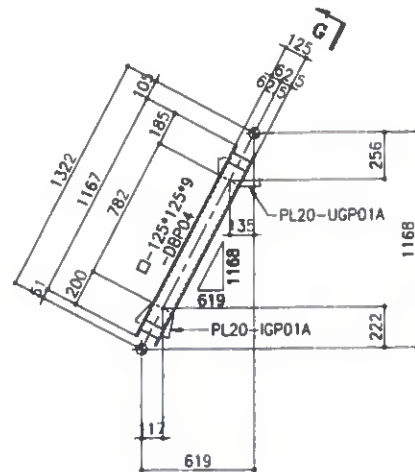
SECT. D



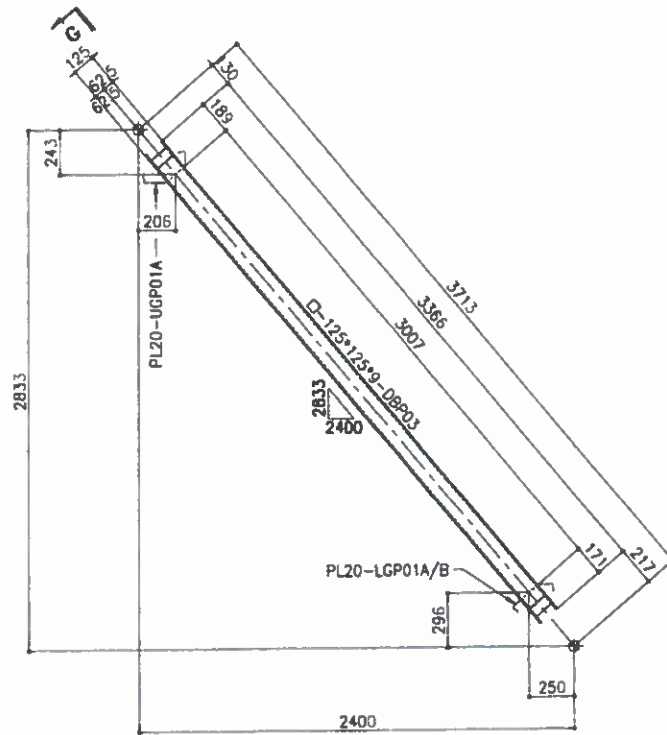
SECT. E



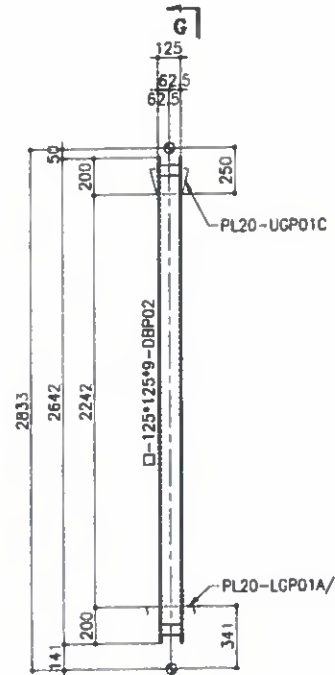
SECT. F



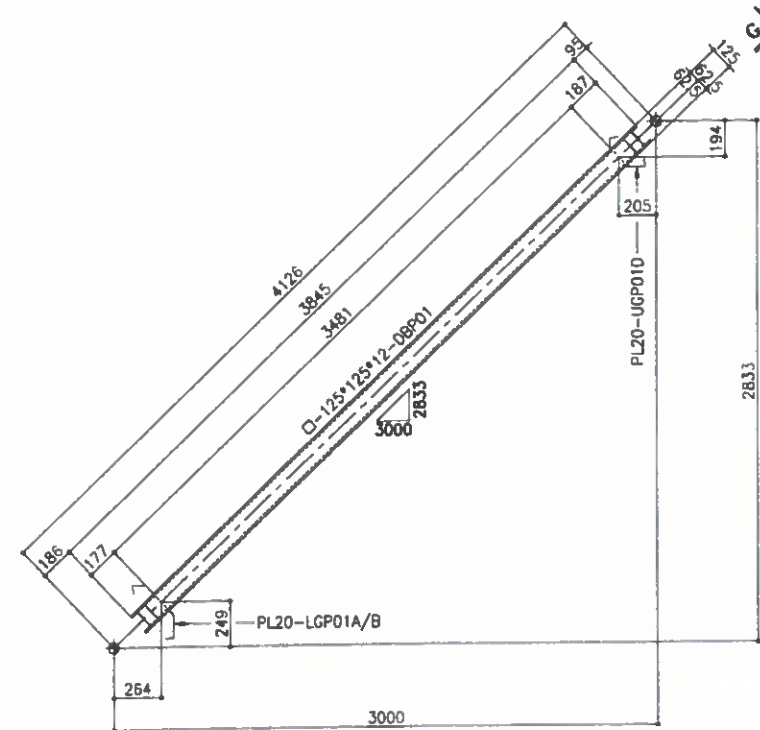
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



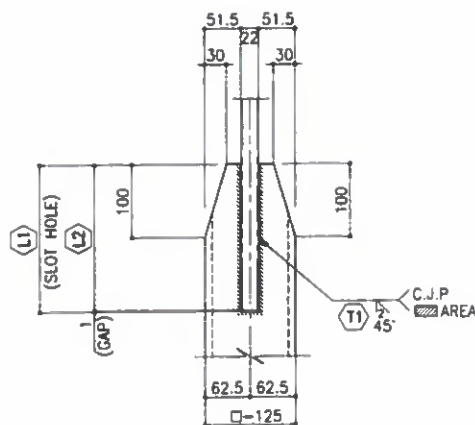
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(□ -125*125*9) (2REQ'D)



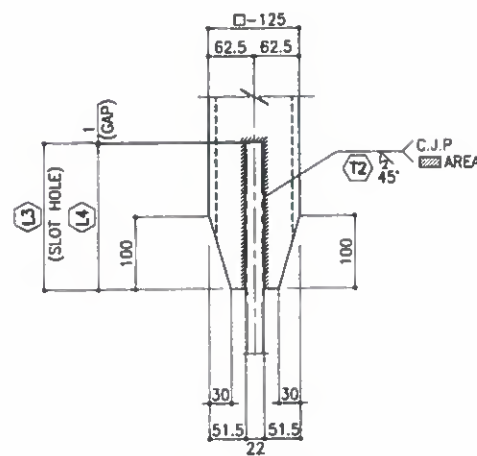
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

on hold

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
-----	------	-------------------------	-------	-------	--------

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D08" (2)**

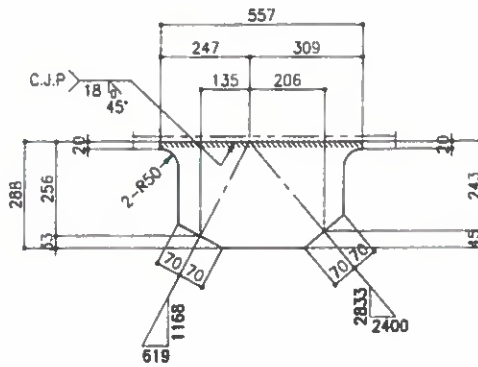
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
**HYUNDAI E&S
YOULCHON**

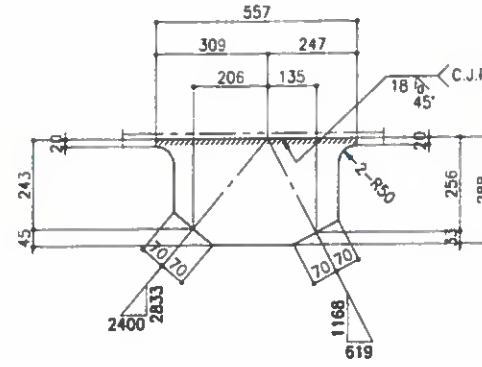
DRAWING NO.
RA140-22-BRG-SD-SEC-023

REV.
A

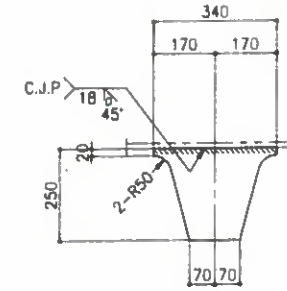
ON SCALE



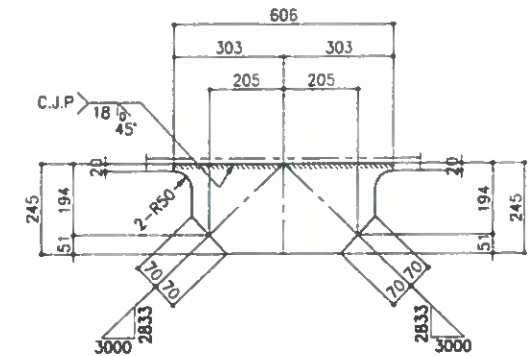
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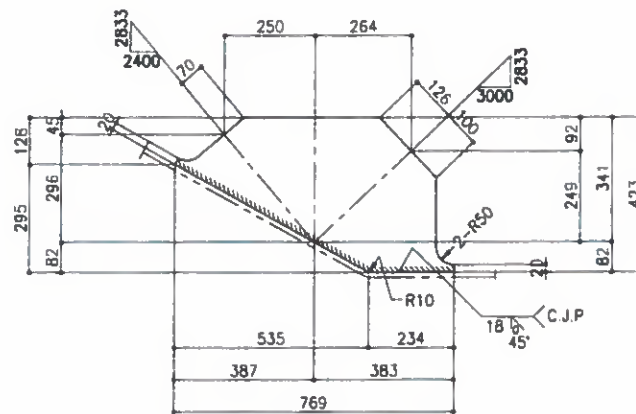
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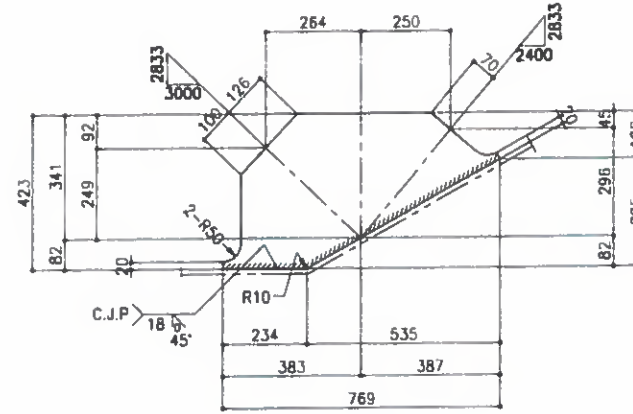
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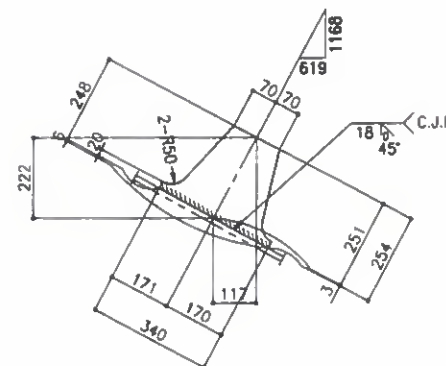
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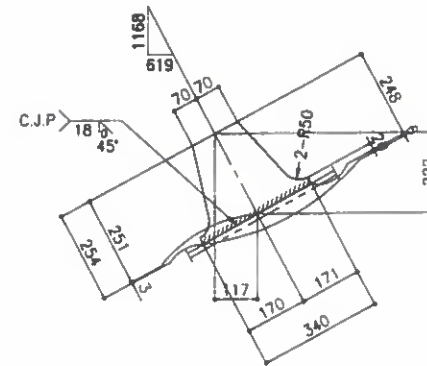
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 10 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

on hold

HYUNDAI ENGINEERING & CONSTRUCTION GROUP
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONG	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SECTION DETAIL "D08" (3)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1 : 10	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI ENGINEERING & CONSTRUCTION					
Combined Group Engineering & Construction Company					
DRAWING NO.					REV.
RA140-22-BRG-SD-SEC-024					A

28-12-2015

ON SCALE

BILL OF MATERIALS							
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.	
D09	<DIAPHRAGM>	-	ONE				
BWU01DA	PL 18*568	5400	1	433	A709M	Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M	Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M	Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M	Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M	Gr.345	
BWLO9D	PL 18*458	5946	1	385	A709M	Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M	Gr.345	
BWIO9DA	PL 18*458	5080	1	329	A709M	Gr.345	
BWIO9DB	PL 18*458	5080	1	329	A709M	Gr.345	
BFIQ1D	PL 14*318	5076	2	355	A709M	Gr.345	
BWE05DA	PL 18*1434	1564	1	317	A709M	Gr.345	
BWE05DB	PL 18*1434	1564	1	317	A709M	Gr.345	
BFED1D	PL 14*318	517	2	36	A709M	Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500	Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500	Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500	Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500	Gr.345	
UGP01A	PL 20*288	557	1	25	A709M	Gr.345	
UGP01B	PL 20*288	557	1	25	A709M	Gr.345	
UGP01C	PL 20*250	340	2	27	A709M	Gr.345	
UGP01D	PL 20*245	606	1	23	A709M	Gr.345	
LGP01A	PL 20*423	769	1	51	A709M	Gr.345	
LGP01B	PL 20*423	769	1	51	A709M	Gr.345	
IGP01A	PL 20*254	340	1	14	A709M	Gr.345	
IGP01B	PL 20*254	340	1	14	A709M	Gr.345	
VSU01A	PL 10*200	568	6	54	A709M	Gr.345	
VSL05A	PL 10*200	529	2	17	A709M	Gr.345	
VSL05B	PL 10*200	529	2	17	A709M	Gr.345	
DEP01	PL 12*55	110	4	2	A709M	Gr.345	
S.TOTAL=				4988			

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*

Date : 27/02/16 Signature : M.J. LEE 

A	2014/07/25	FOR APPROVAL	H. PARK	S.S. SON	S. MOON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABA
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SECTION DETAIL "D09" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROV
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25
CONTRACTOR				



HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.	RE
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RA140-22-BRG-SD-SEC-025

NOTES

1. MATERIALS SEE D.O.V. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

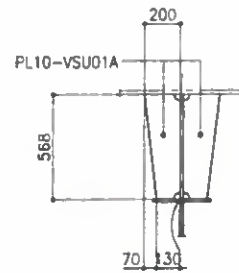
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.	RE
-------------	----

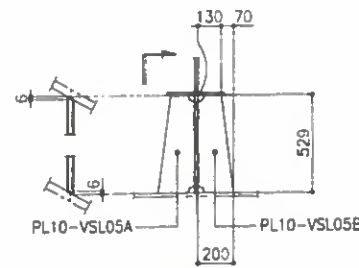
RA140-22-BRG-SD-SEC-025

ON SCALE

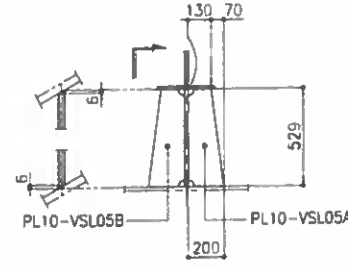
Refer To Comments on The same drawing number under submittal # RA140-32-BRG-CW-92130-A



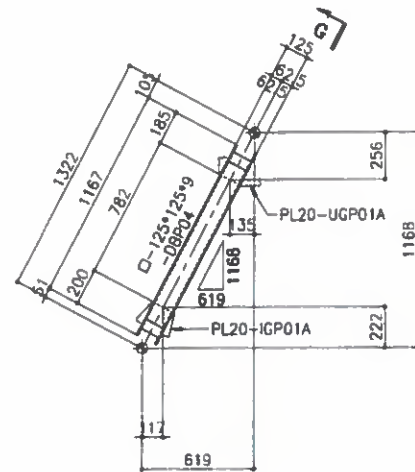
SECT. D



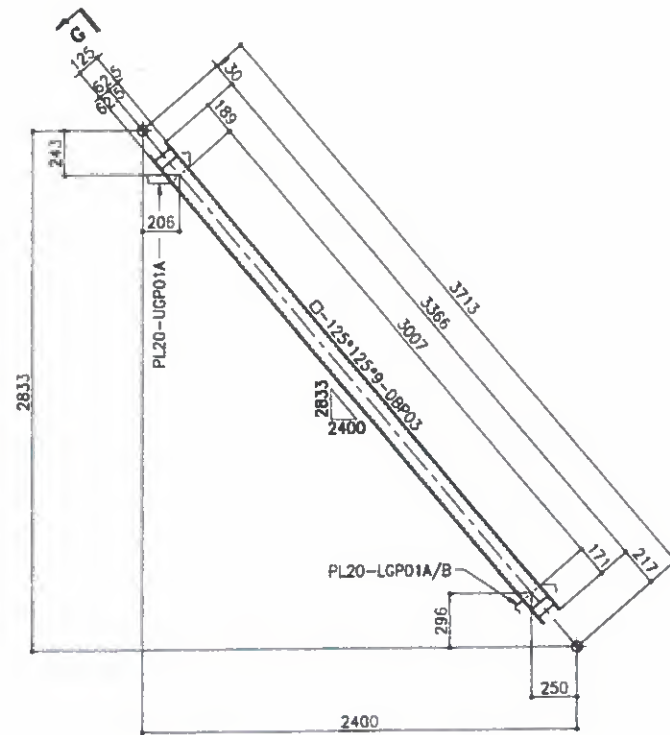
SECT. E



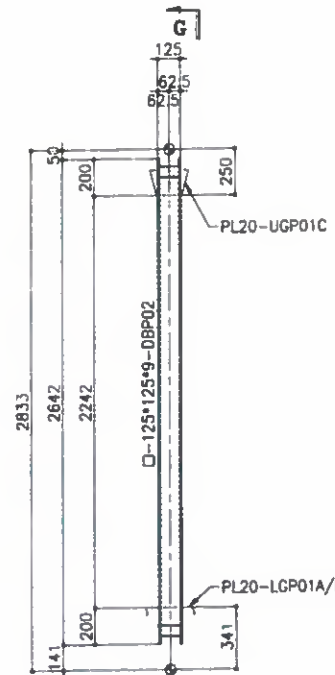
SECT. F



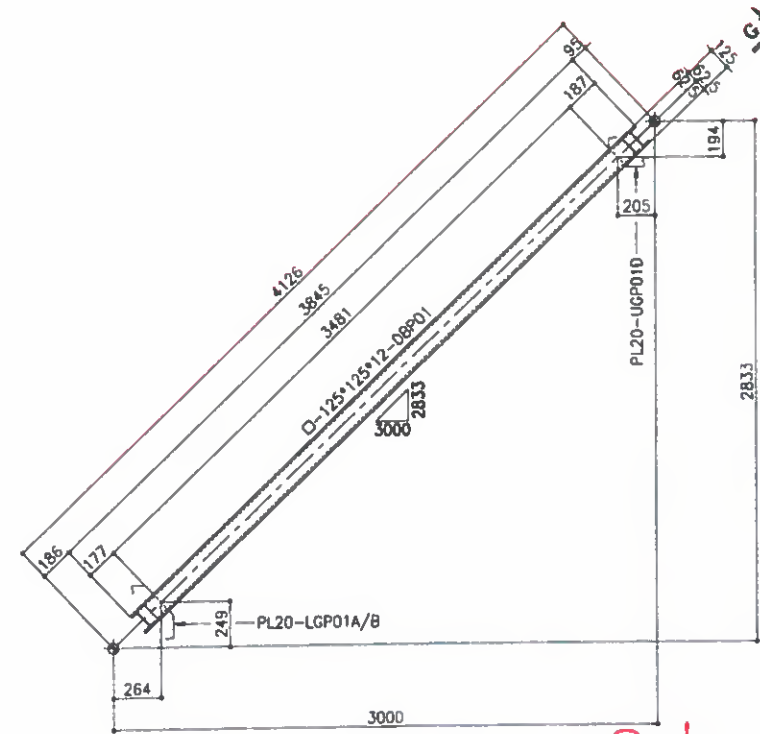
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)

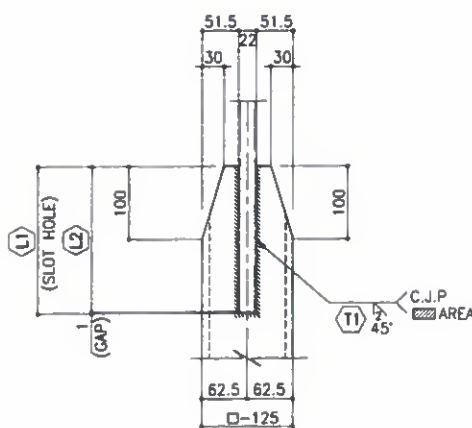


"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)

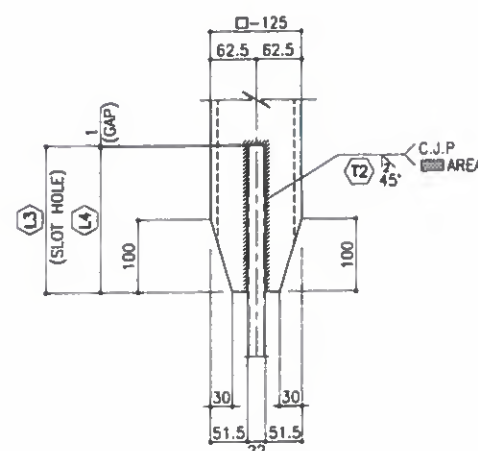


"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)

92130 → 2016-01-15
92120 → 2015-12-28



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D09" (2)

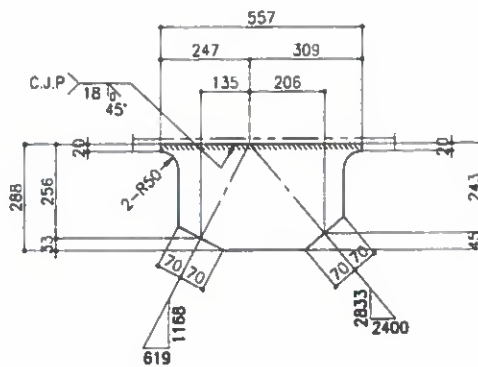
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHONG	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

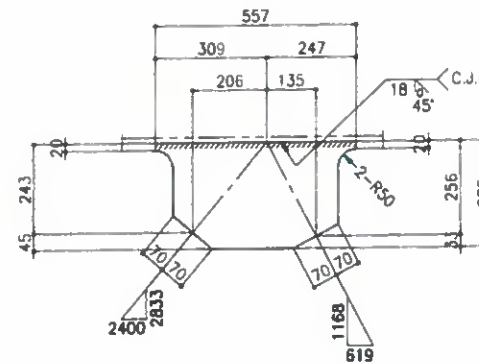
DRAWING NO.
RA140-22-BRG-SD-SEC-026

REV.
A

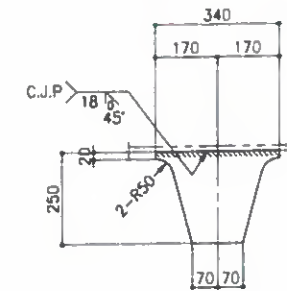
ON SCALE



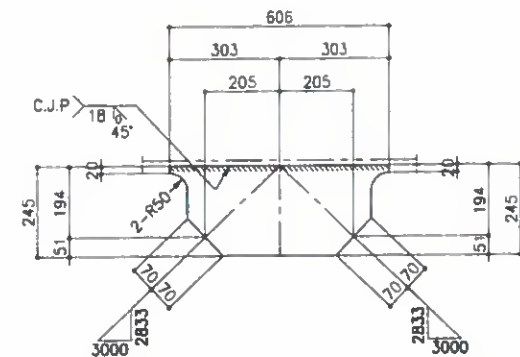
"PL20-UGP01A" DETAIL



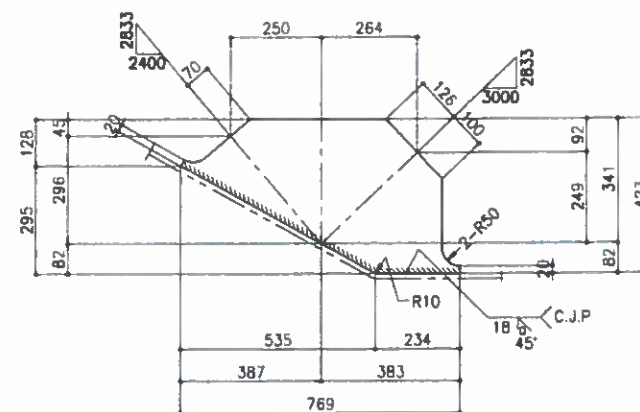
"PL20-UGP01B" DETAIL



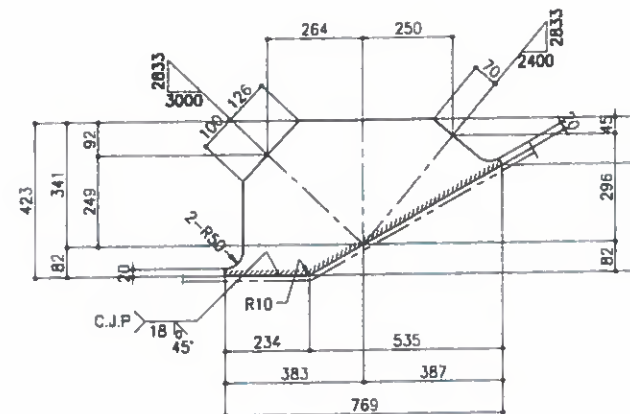
"PL20-UGP01C" DETAIL



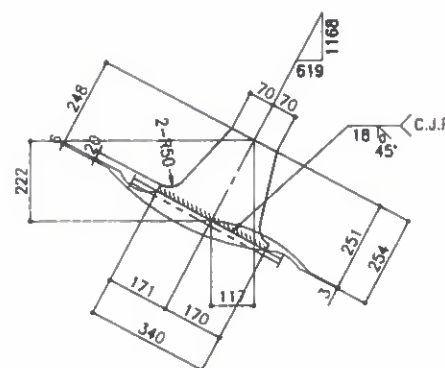
"PL20-UGP01D" DETAIL



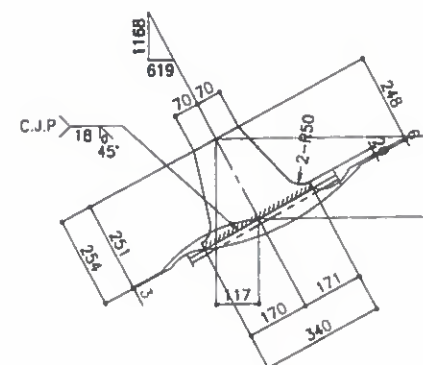
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

Refer to comments on the same drawing number under submittal # RA140-32-BRG-CW-92130-A1

?!

92130 → 2016-01-15
92120 → 2015-12-28

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

A 2016.02.25 FOR APPROVAL					H.J.PARK		S.S.SON		S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.					
EMPLOYER										
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION										
PROJECT TITLE										
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140										
DRAWING TITLE										
MAIN BRIDGE STEEL DECK SECTION DETAIL "D09" (3)										
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED						
1 : 10	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON						
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25						
CONTRACTOR										
HYUNDAI E&S YOULCHON										
DRAWING NO.										
RA140-22-BRG-SD-SEC-027										
REV.										
A										

NOTES
1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R= 35 , D= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To comments on The same drawing number under
Submittal # RA140-32-BRG-CW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D21	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL21D	PL 18*474	5946	1	398	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU01DA	PL 18*472	5088	1	339	A709M Gr.345	
BWU01DB	PL 18*472	5088	1	339	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BWU01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFU01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL01A	PL 10*200	545	2	17	A709M Gr.345	
VSL01B	PL 10*200	545	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				5034		

FOR CONSTRUCTION

Date: 27/02/16 Signature: M.J. LEE

28-12-2015

DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
------	-------------------------	-------	-------	---------

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D21" (1)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-SEC-101

REV.
A

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

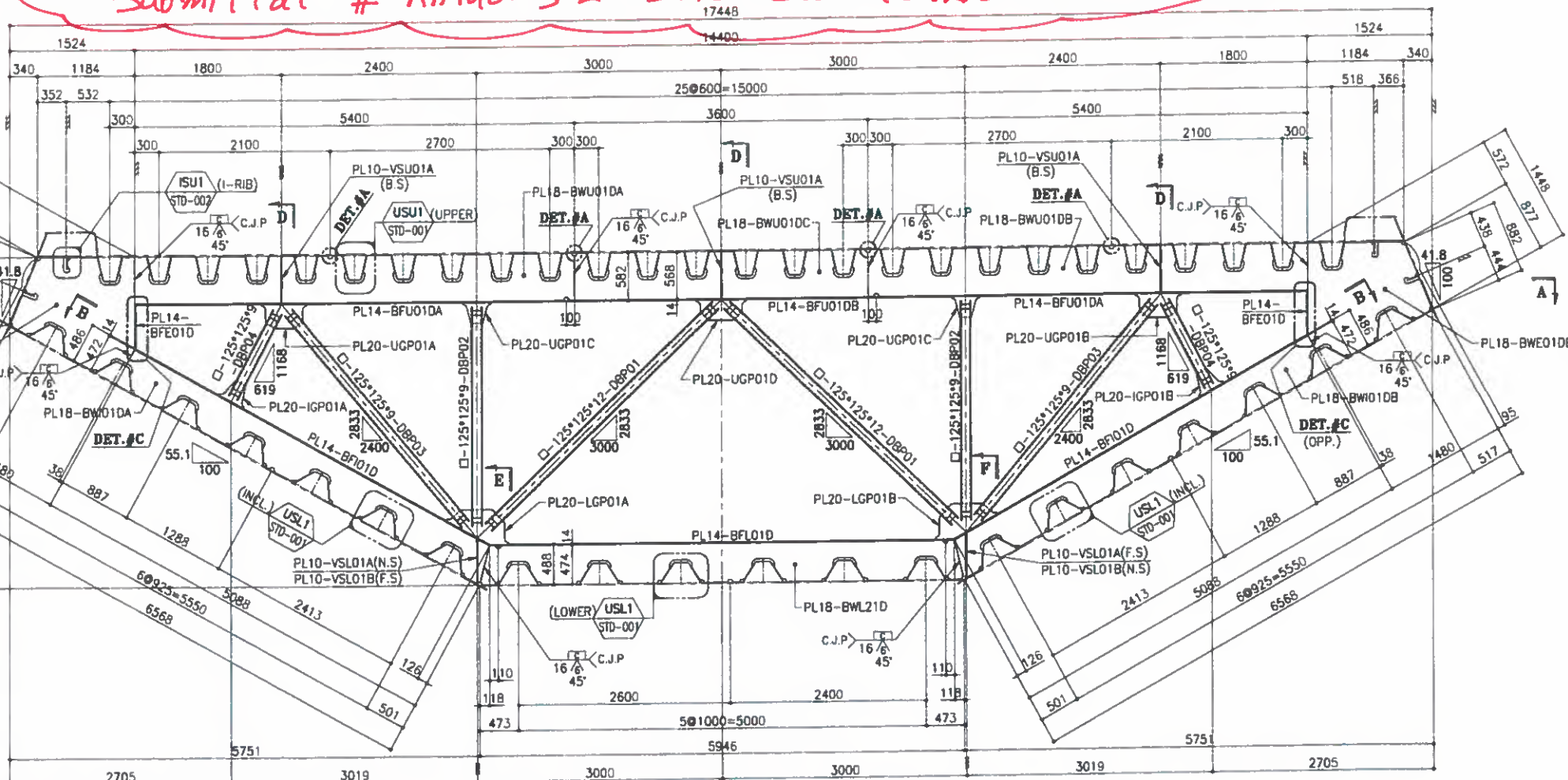
1. MATERIALS SEE S.D.N. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL

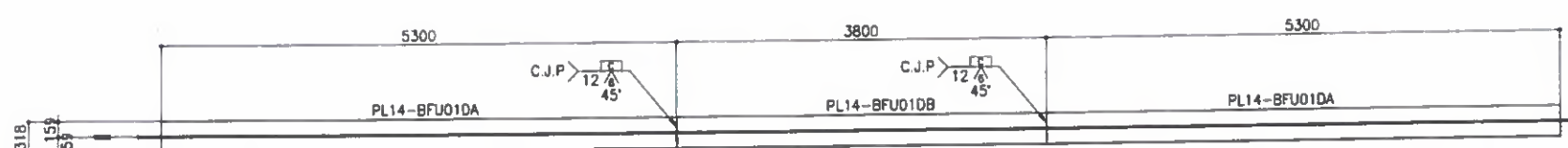
2016.02.25

**HYUNDAI E&S
YOULCHON**

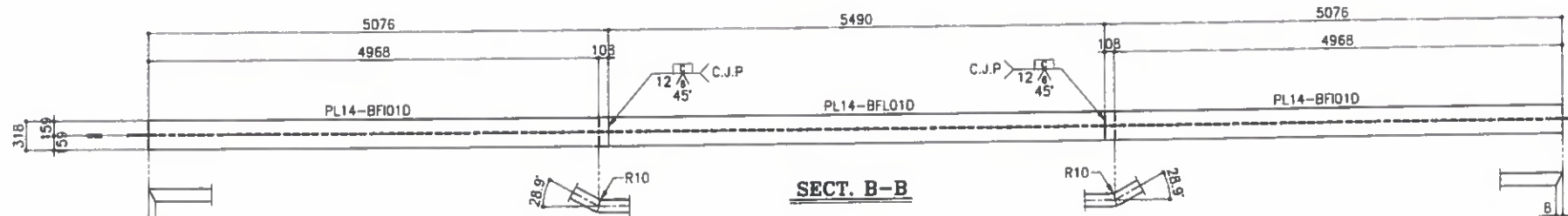
SECTION D21



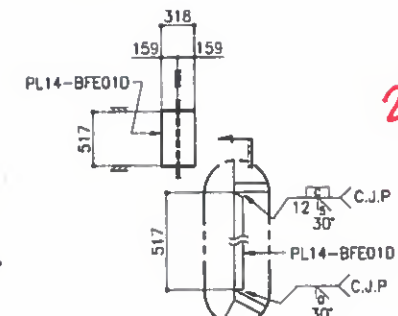
SECT. A-A



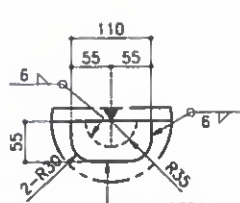
SECT. B-B



DET.#C

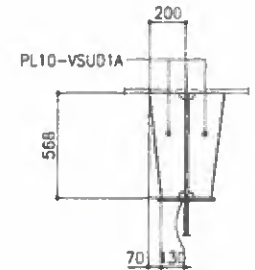


DET.#A

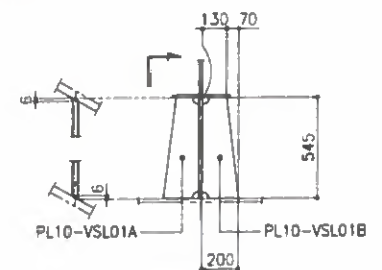


ON SCALE

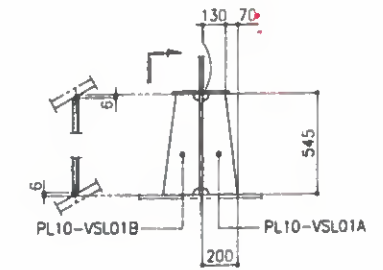
Refer To comments on The same drawing number under submittal # RA140-32-BRG-CW-92120-A1



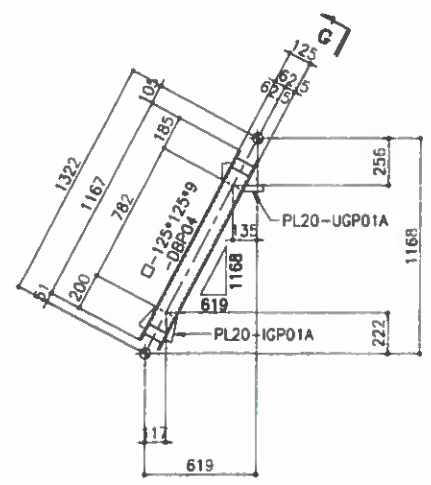
SECT. D



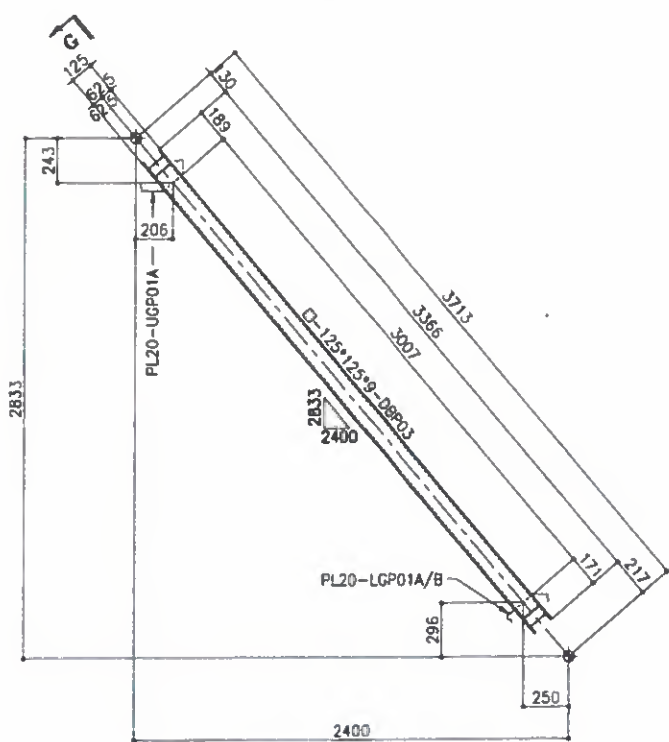
SECT. E



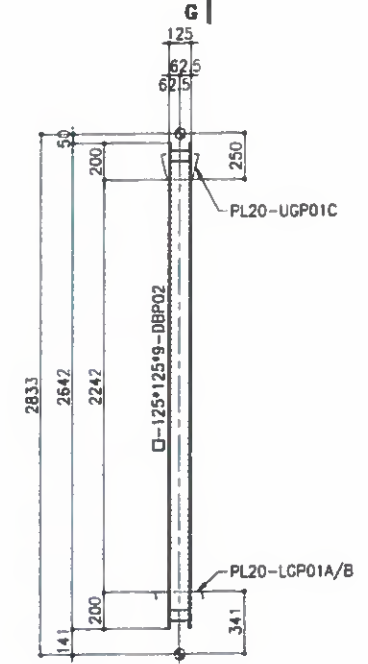
SECT. F



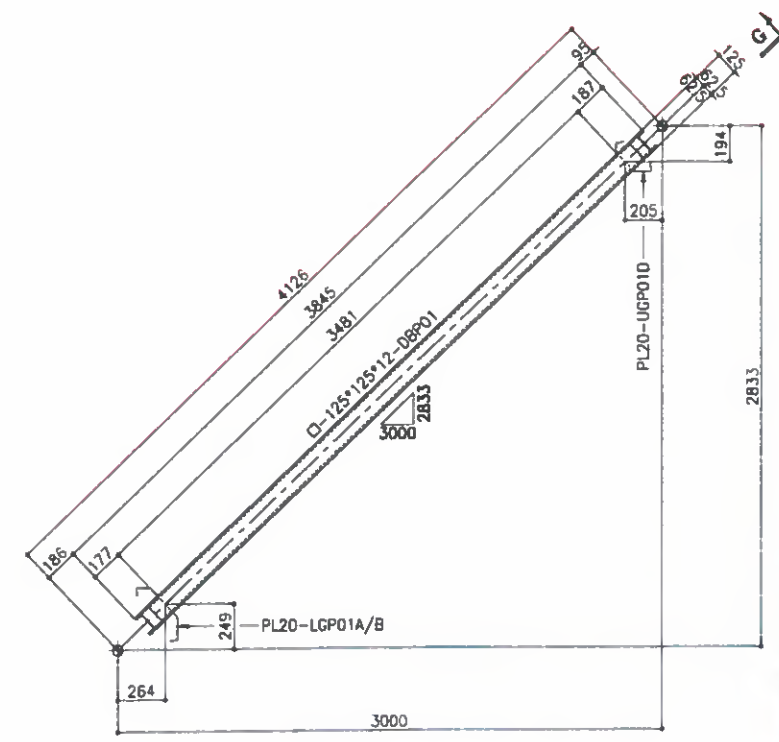
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



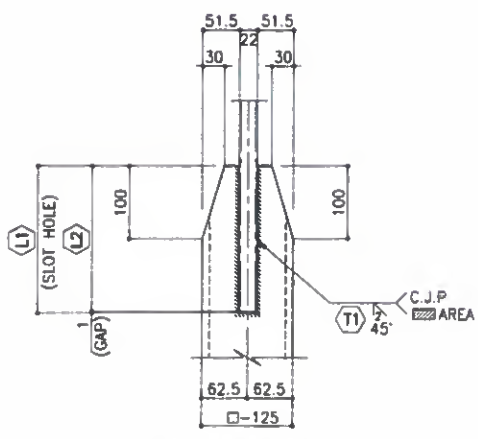
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



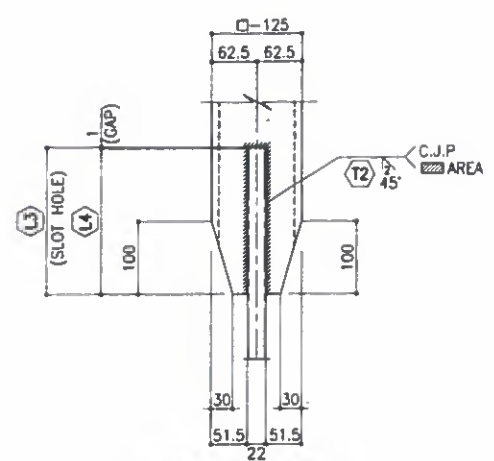
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R= 35, O= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	28-12-2015				

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D21" (2)

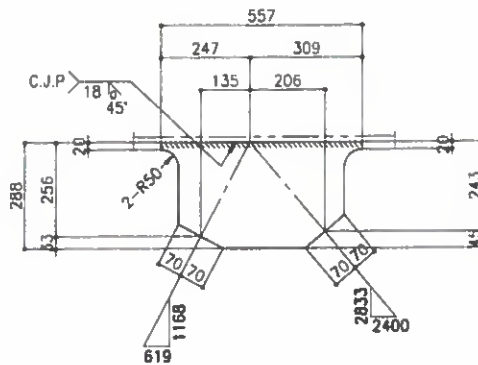
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

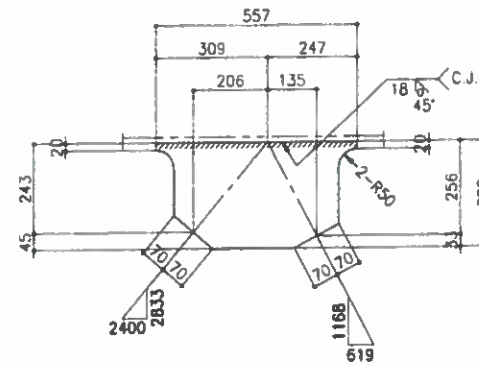
DRAWING NO.
RA140-22-BRG-SD-SEC-102

REV.
A

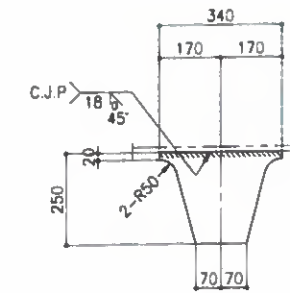
ON SCALE



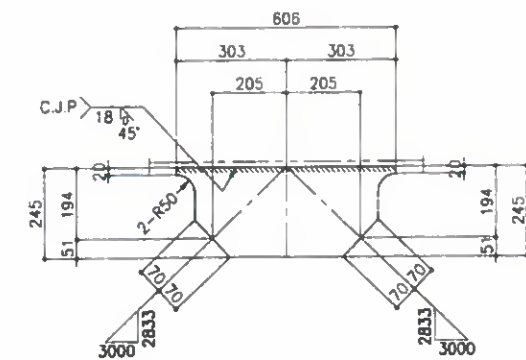
"PL20-UGP01A" DETAIL



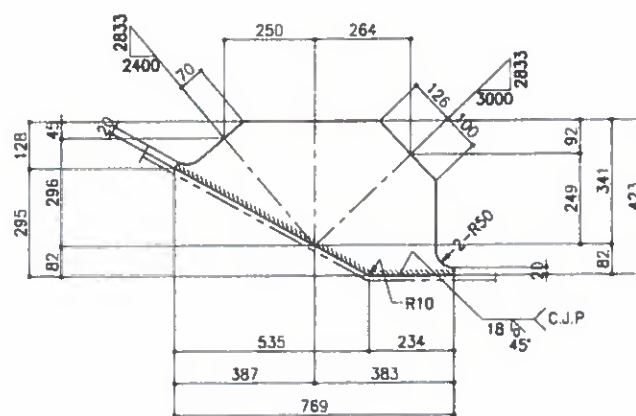
"PL20-UGP01B" DETAIL



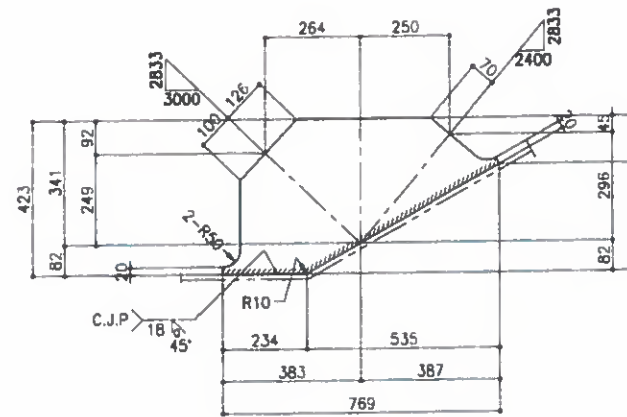
"PL20-UGP01C" DETAIL



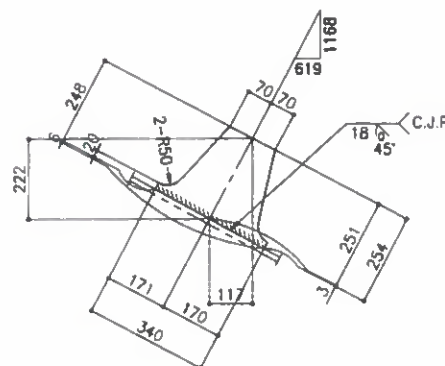
"PL20-UGP01D" DETAIL



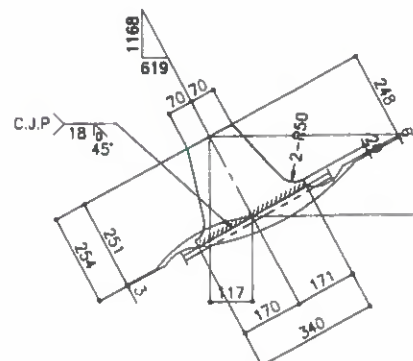
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

Refer To comments on The same drawing
number under submittal # RA140-32-BRG
CW - 92120-A1

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D21" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHONG	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-103
REV
A

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35, C= 10 mm UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D22	<DIAPHRAGM>	—	ONE	—	—	—
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL22D	PL 18*474	5937	1	398	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU02DA	PL 18*470	5091	1	338	A709M Gr.345	
BWU02DB	PL 18*470	5091	1	338	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE02DA	PL 18*1446	1575	1	322	A709M Gr.345	
BWE02DB	PL 18*1446	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL02A	PL 10*200	542	2	17	A709M Gr.345	
VSL02B	PL 10*200	542	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				5030		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

on hold
28-12-2015

REVISIONS FOR APPROVAL

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
1					

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D22" (1)**

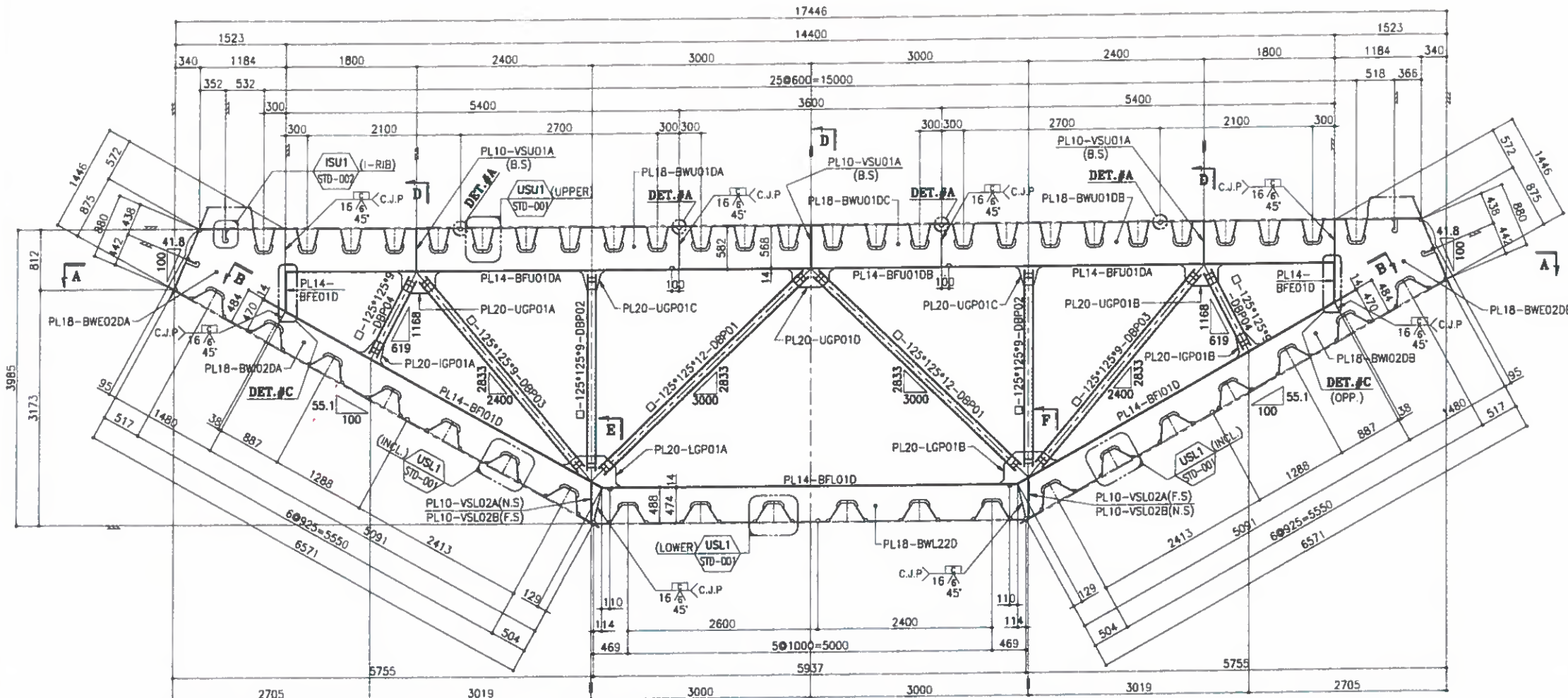
SCALE
1 : 35
DATE ISSUED
2016.02.25
CONTRACTOR
HYUNDAI E&S
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-SEC-104

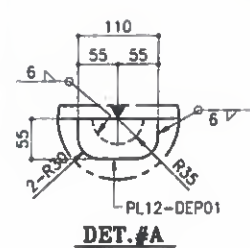
FOR APPROVAL
2016.02.25
**HYUNDAI E&S
YOULCHON**

NOTES

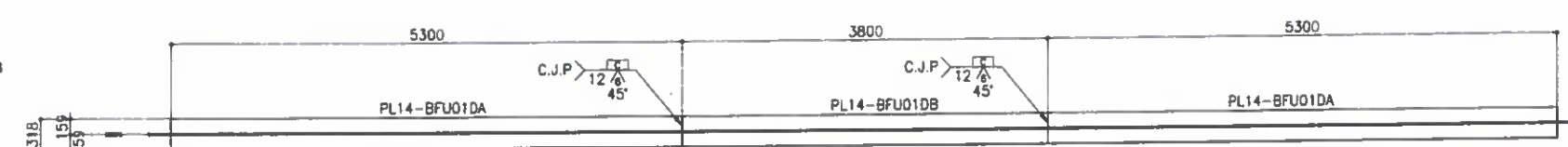
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE



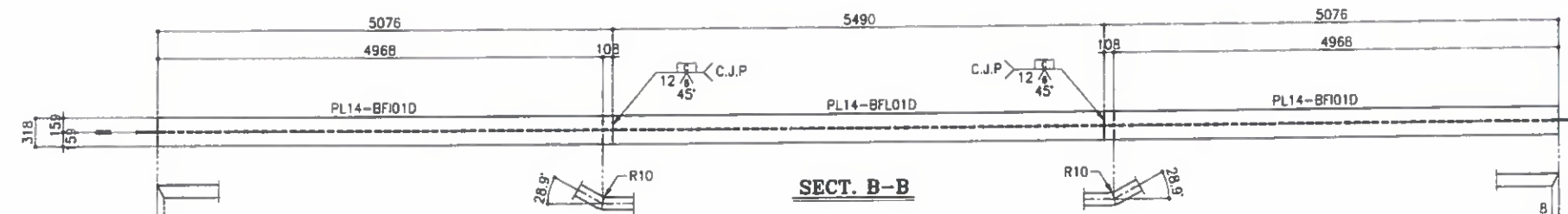
SECTION D22



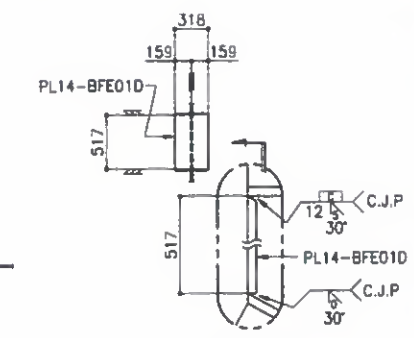
DET. #A



SECT. A-A



SECT. B-B

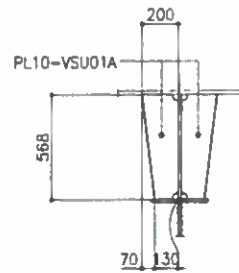


DET. #C

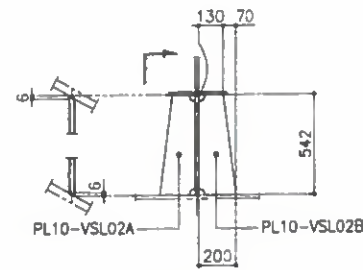
REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

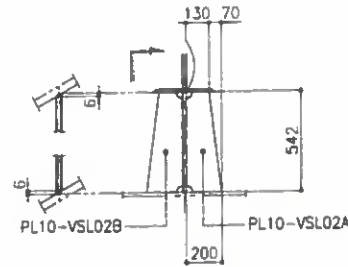
ON SCALE



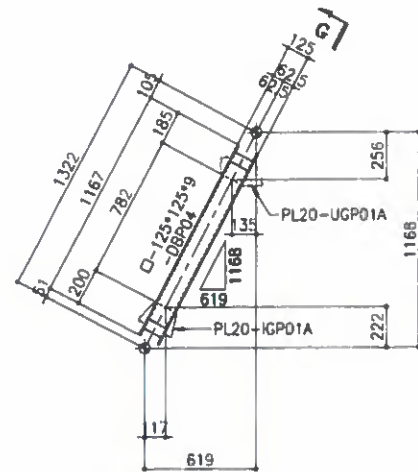
SECT. D



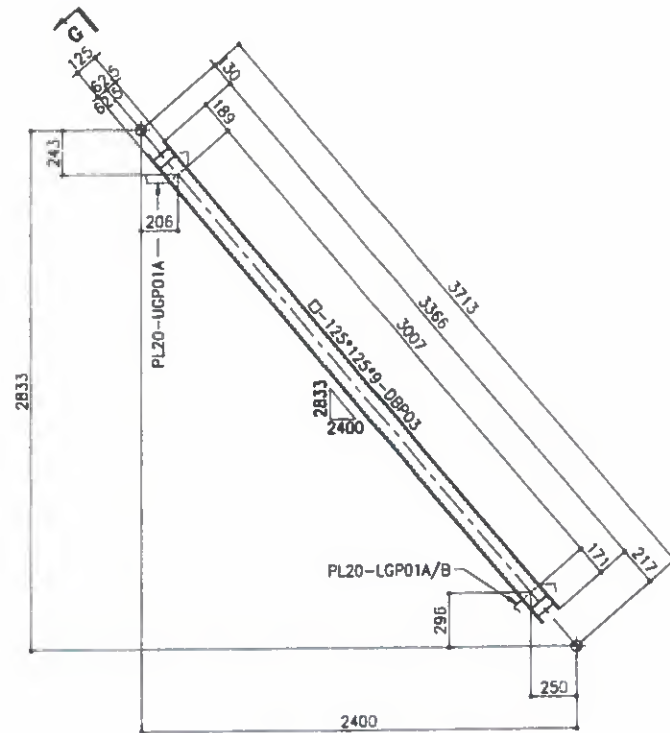
SECT. E



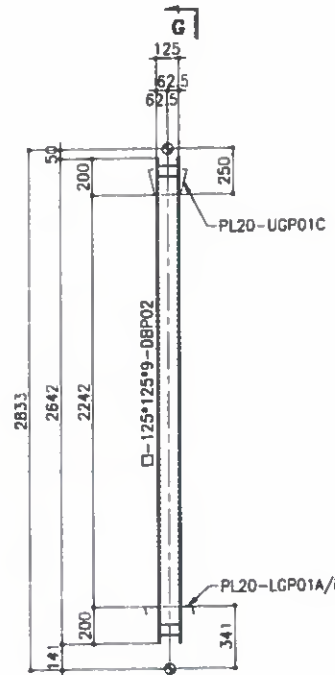
SECT. F



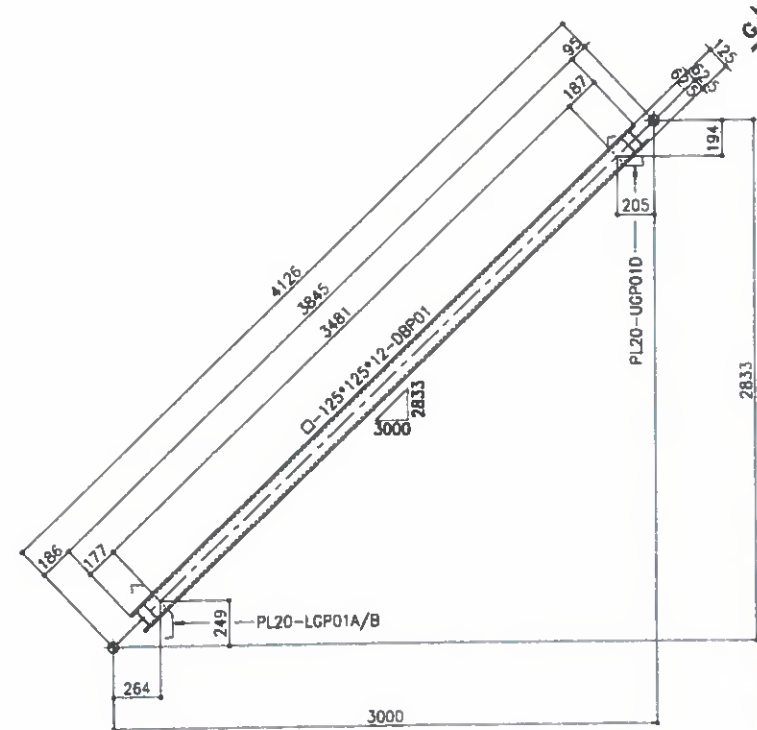
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



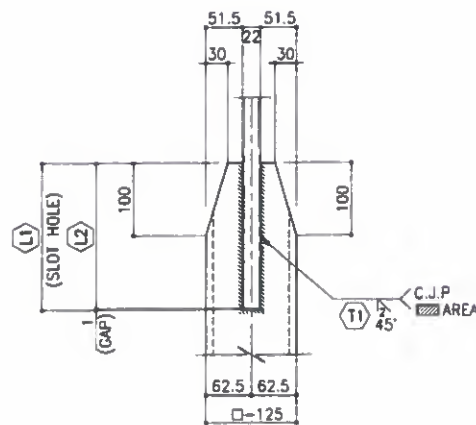
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



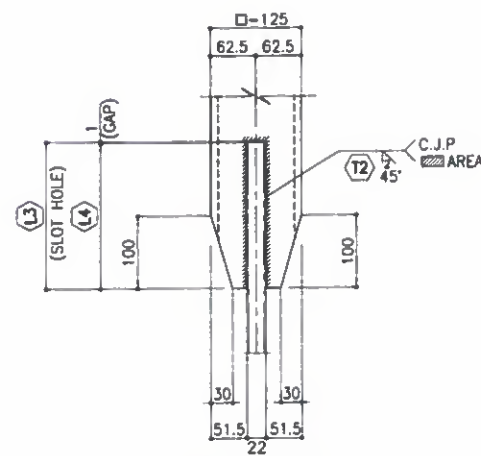
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLUP R= 35, C= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HYUNDAI E&S
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

On hold
28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D22" (2)

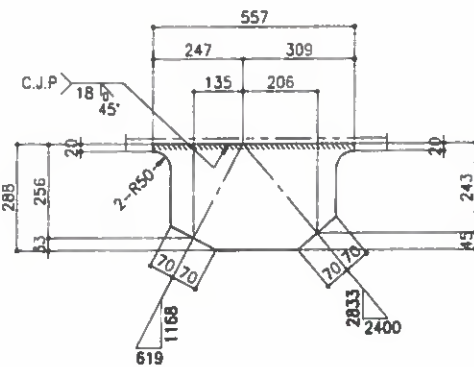
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

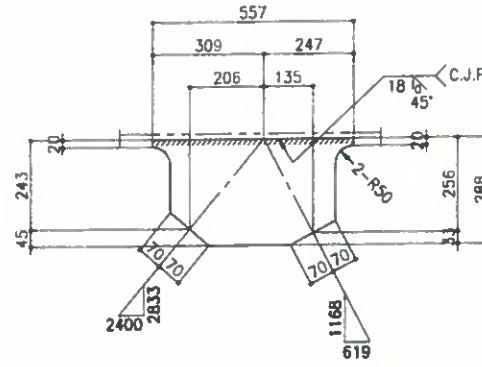
DRAWING NO.
RA140-22-BRG-SD-SEC-105

REV.
A

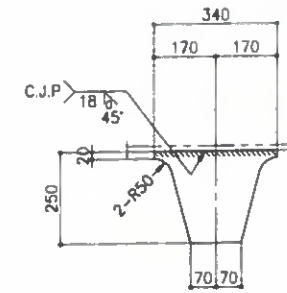
ON SCALE



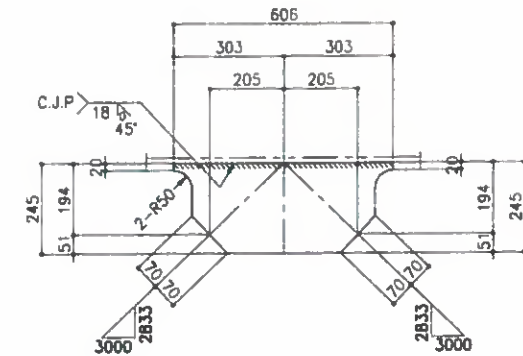
"PL20-UGP01A" DETAIL



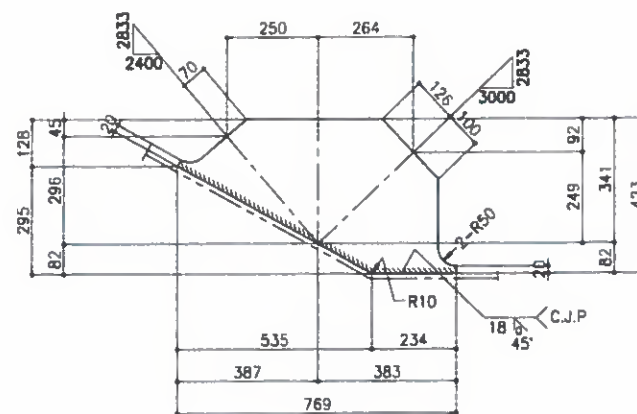
"PL20-UGP01B" DETAIL



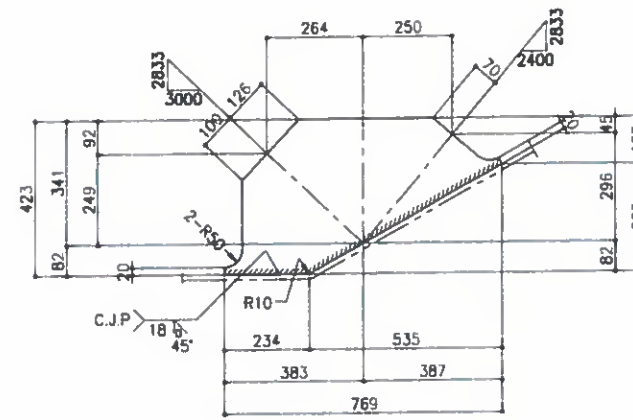
"PL20-UGP01C" DETAIL



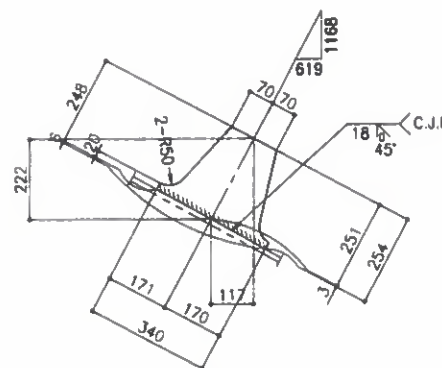
"PL20-UGP01D" DETAIL



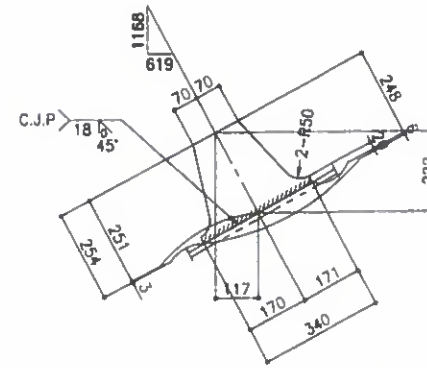
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, O= 10 UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL

2016.02.25

HYUNDAI E&S
YOUNGCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

On hold
28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROD.
------	------	-------------------------	-------	-------	---------

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D22" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION

Combined Group
Contracting Company

DRAWING NO.

RA140-22-BRG-SD-SEC-106

REV.

A

Refer To Comments on The same drawing number under
Submittal RA140-32-BRG-CW-DW-92130-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D23	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL23D	PL 18*474	5960	1	399	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU03DA	PL 18*472	5079	1	339	A709M Gr.345	
BWU03DB	PL 18*472	5079	1	339	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BWE01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL01A	PL 10*200	545	2	17	A709M Gr.345	
VSL01B	PL 10*200	545	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				5034		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

92120 → 2015-12-28
92130 → 2016-01-15 ?!

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

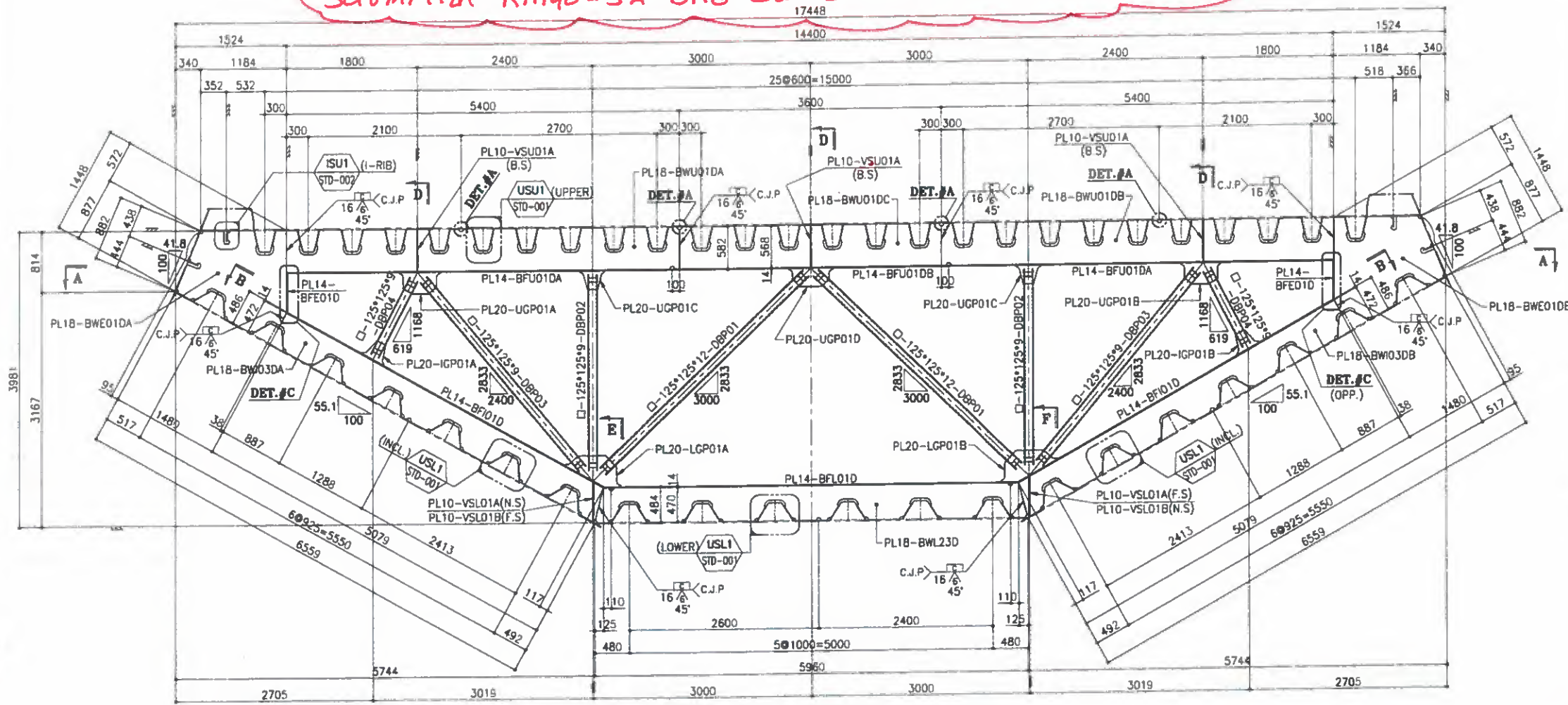
PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D23" (1)

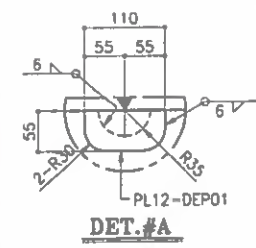
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-107
REV
A



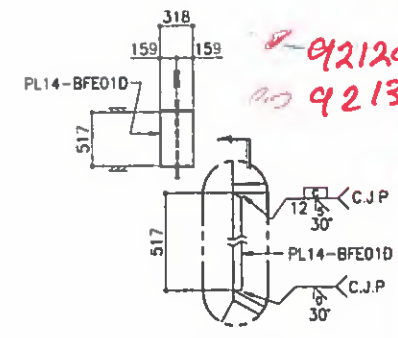
SECTION D23



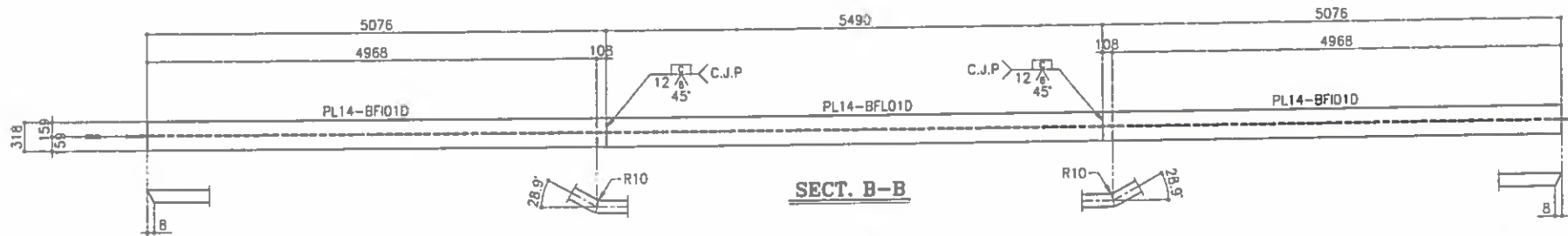
DET. #A



SECT. A-A



DET. #C



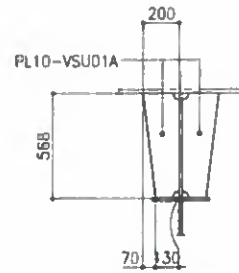
SECT. B-B

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , C= 10 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

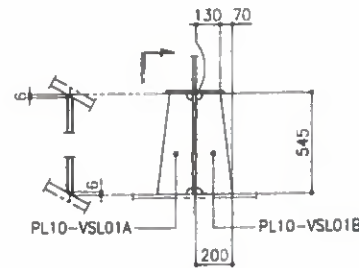
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

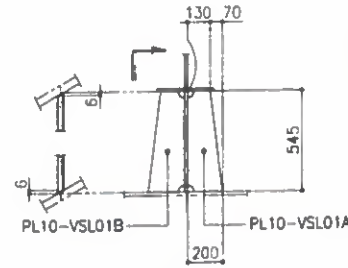
Refer To comments on the same drawing number under submittal RA140-32-BRG-CW-DW-92130-A1



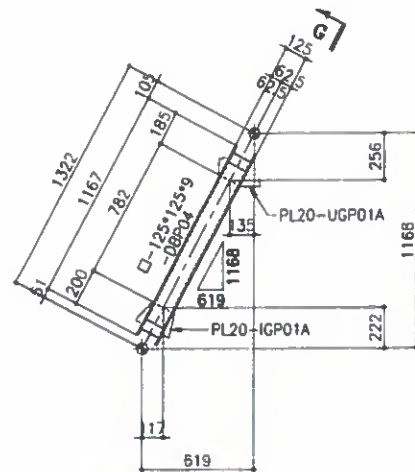
SECT. D



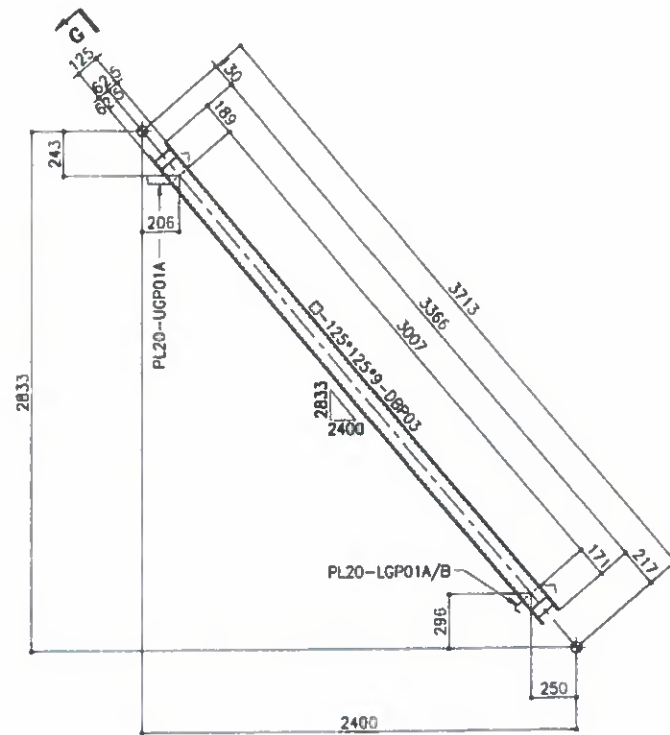
SECT. E



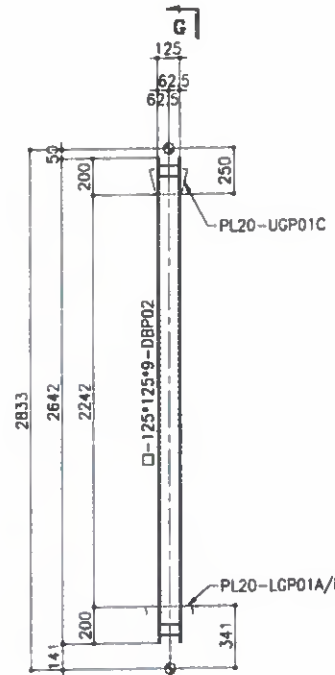
SECT. F



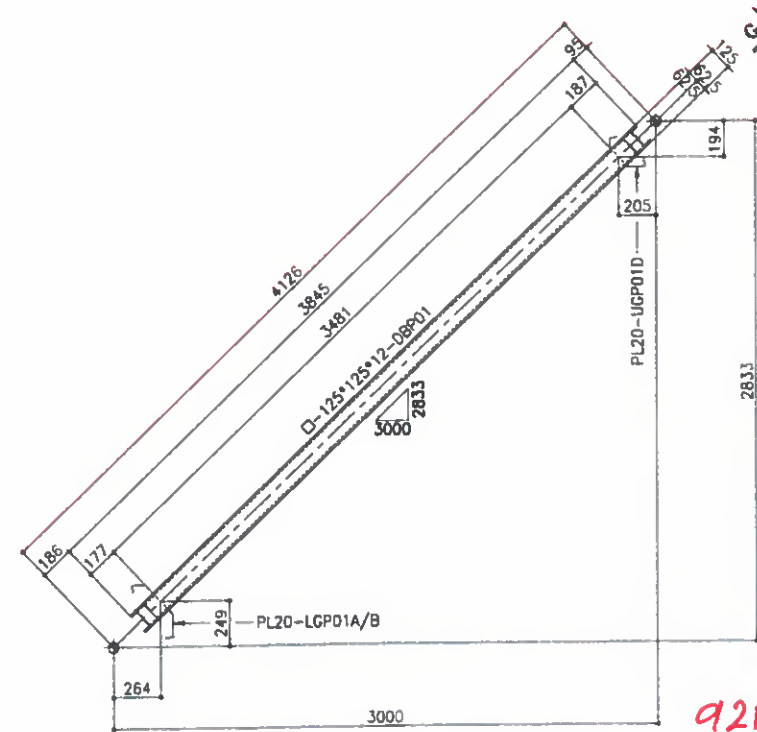
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



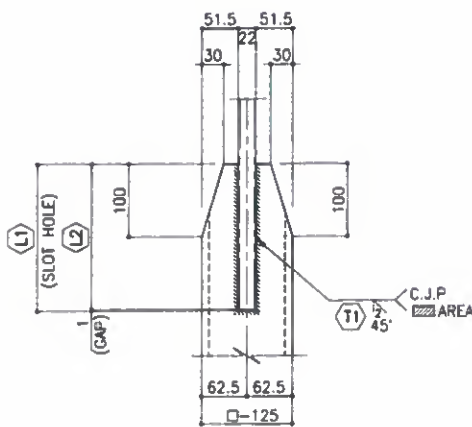
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



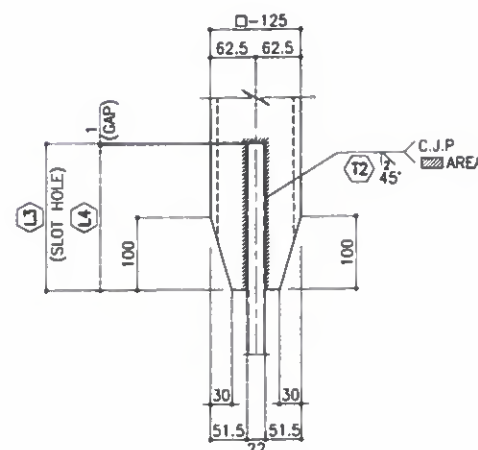
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R= 25, C= 10, UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

92120 → 2015-12-28 ?
92130 → 2016-01-15 ?

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
-----	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D23" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

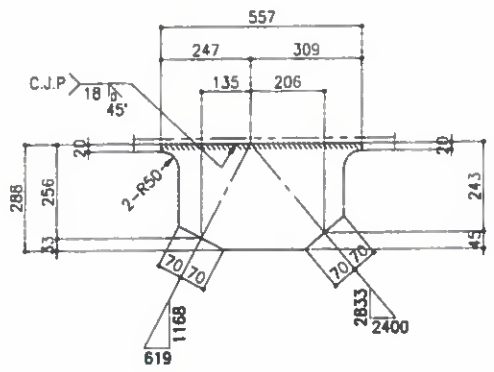
CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-108

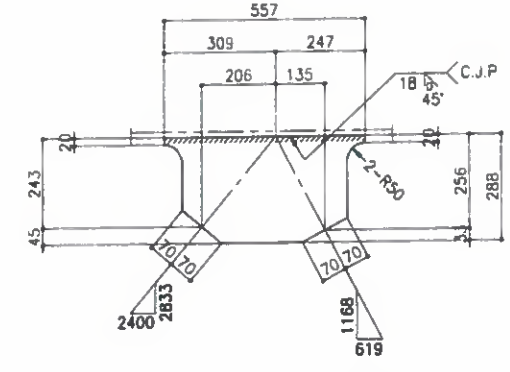
REV.
A

Refer To comments on The same drawing number under submittal RA140-32-BRG-CW-DW-92130 A1

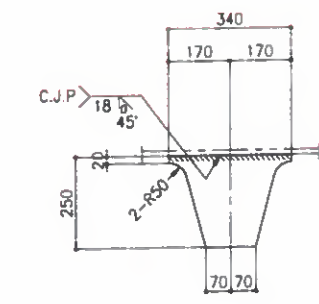
ON SCALE



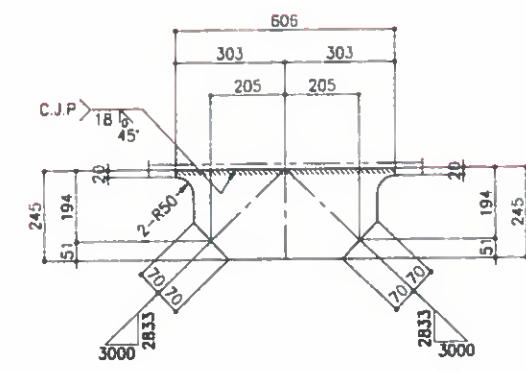
"PL20-UGP01A" DETAIL



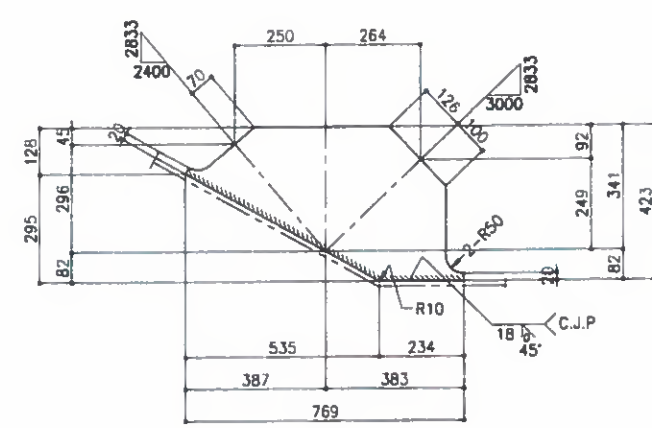
"PL20-UGP01B" DETAIL



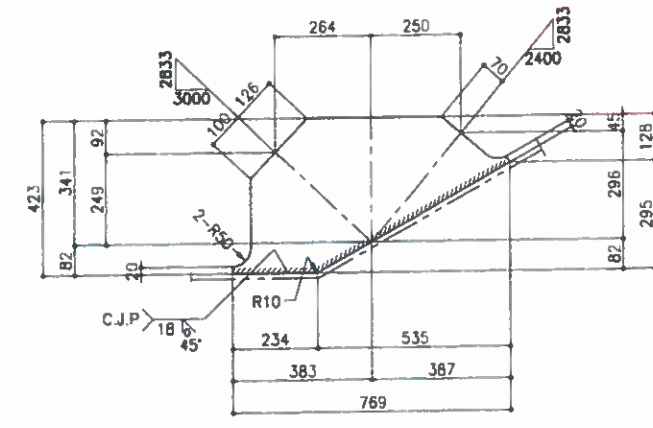
"PL20-UGP01C" DETAIL



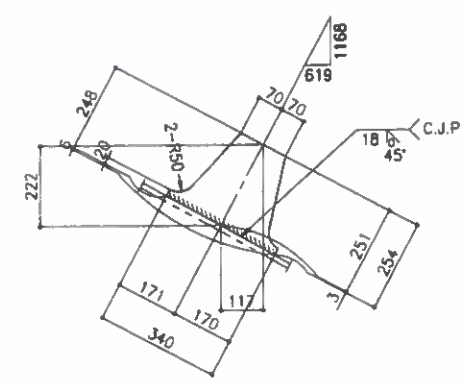
"PL20-UGP01D" DETAIL



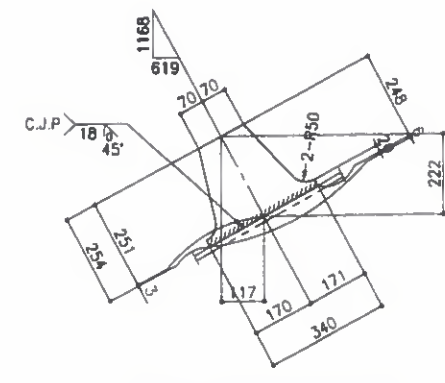
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

92920 → 2015-12-28
92130 → 2016-01-15

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
1	2016.02.25		H.I.PARK	S.S.SOH	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D23" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SOH	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-109

NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 25, C= 10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

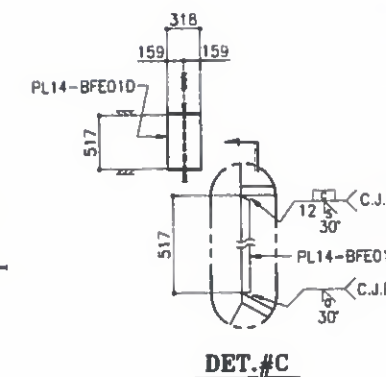
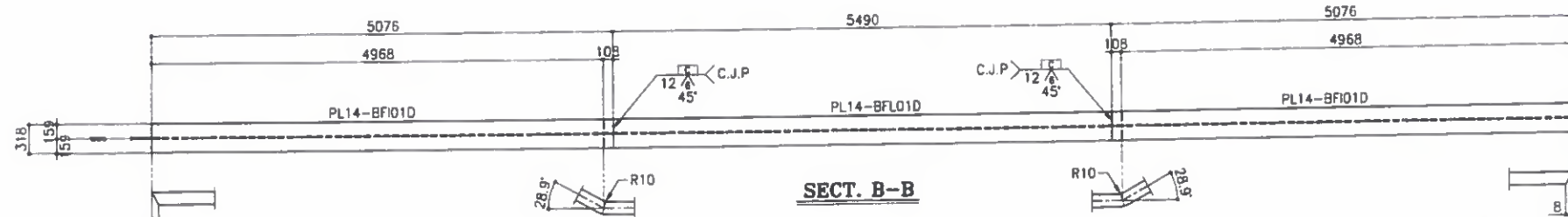
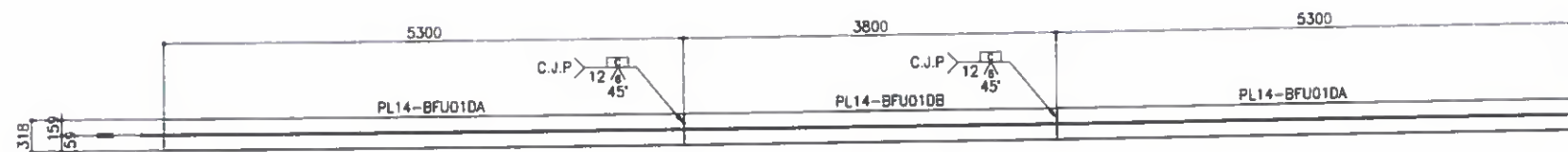
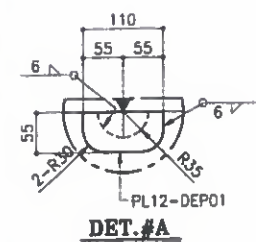
A1(34x48)mm (2mm)

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
D24	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL24D	PL 18*472	5945	1	396	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU04DA	PL 18*470	5087	1	338	A709M Gr.345	
BWU04DB	PL 18*470	5087	1	338	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU04DA	PL 18*1446	1573	1	321	A709M Gr.345	
BWU04DB	PL 18*1446	1573	1	321	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL02A	PL 10*200	542	2	17	A709M Gr.345	
VSL02B	PL 10*200	542	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				5027		

SECTION D24



REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 25, Ø= 10 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL

2016.02.25

HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M. J. LEE

on hold
28-12-2015

REV. DATE DESCRIPTION OF REVISION DRAWN CHECK APPRO.

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

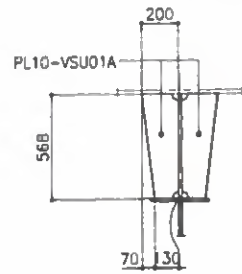
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D24" (1)

SCALE 1 : 35
DATE ISSUED 2016.02.25
DRAWN H.I.PARK
DESIGNED K.W.CHOI
CHECKED S.S.SON
APPROVED S.M.KHON

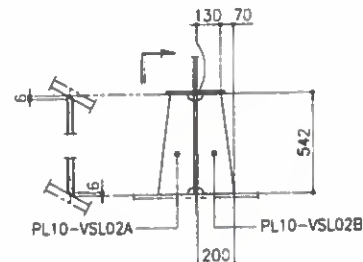
CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-SEC-110
REV. A

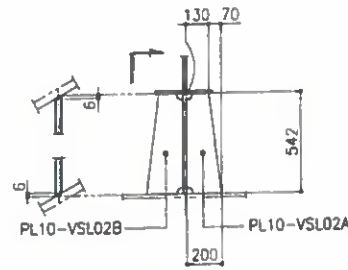
ON SCALE



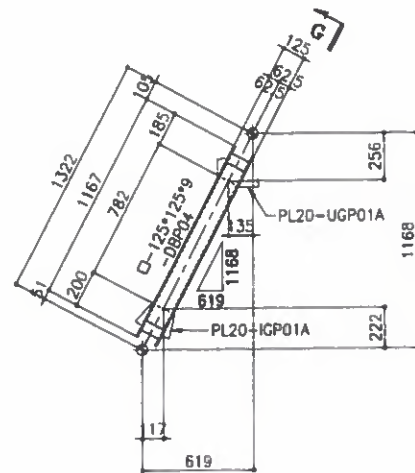
SECT. D



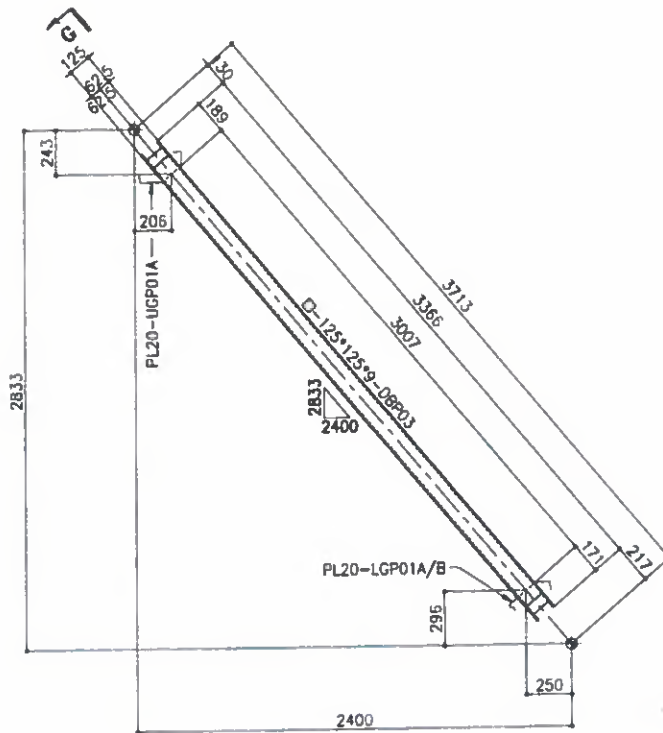
SECT. E



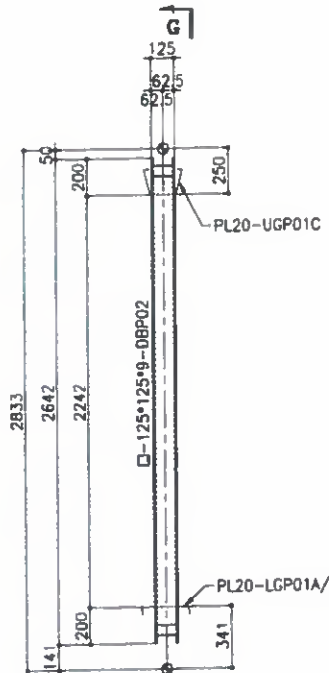
SECT. F



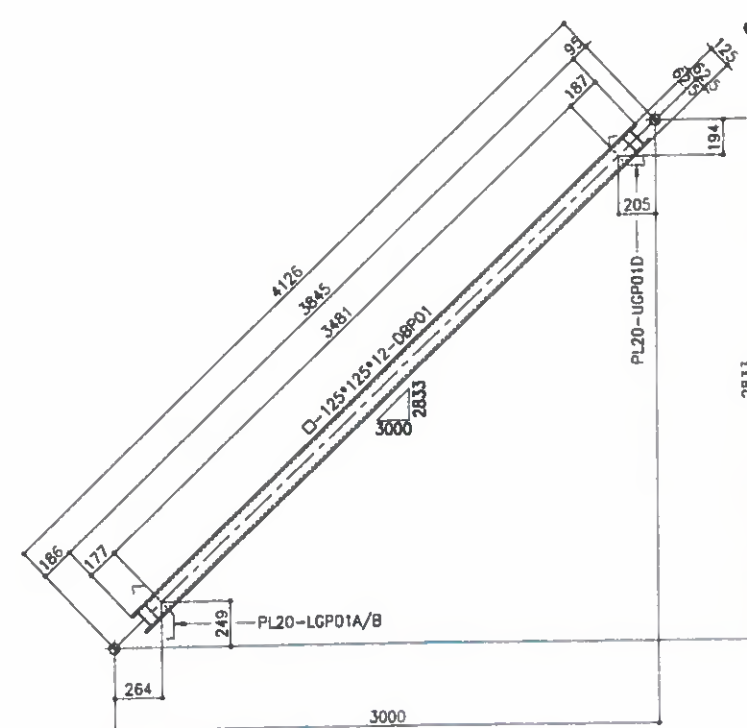
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



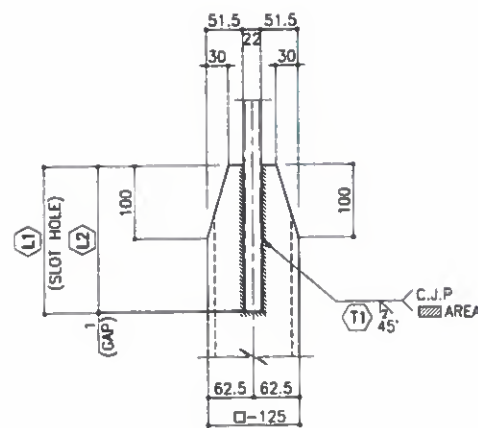
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



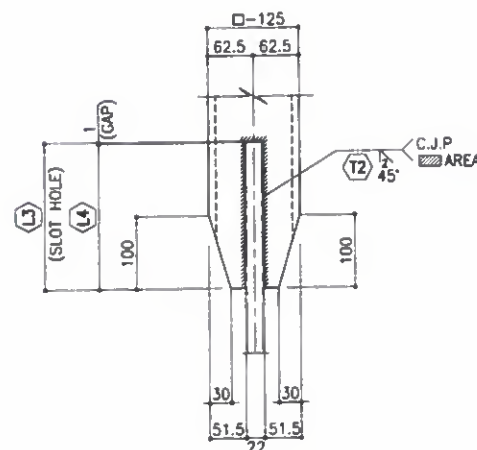
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=30, D=10 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HYUNDAI E&S CORP.
FOR CONSTRUCTION
Date: 27/02/16 Signature: M. J. LEE

On hold
28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D24" (2)

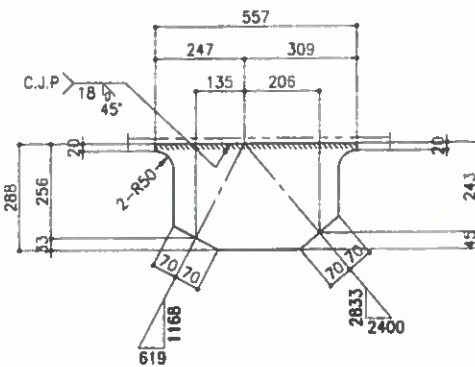
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 20	H.I.PARK	K.W.CHONG	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group
Engineering & Construction

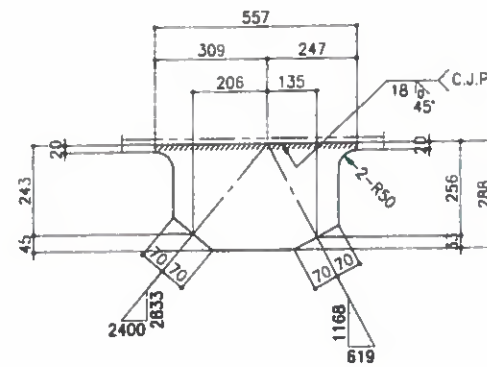
DRAWING NO.
RA140-22-BRG-SD-SEC-111

REV.
A

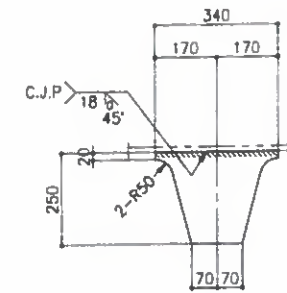
ON SCALE



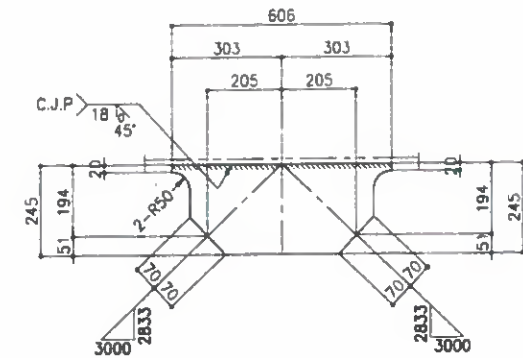
"PL20-UGP01A" DETAIL



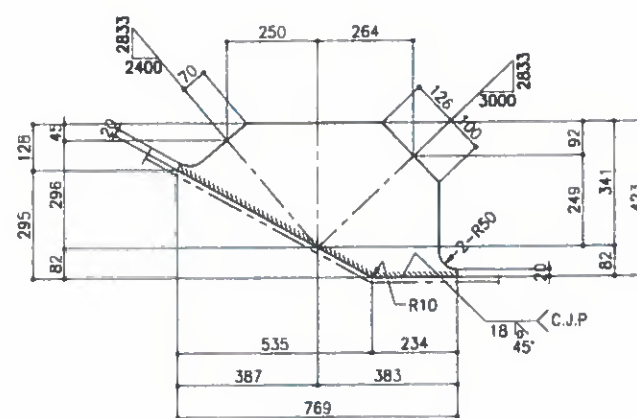
"PL20-UGP01B" DETAIL



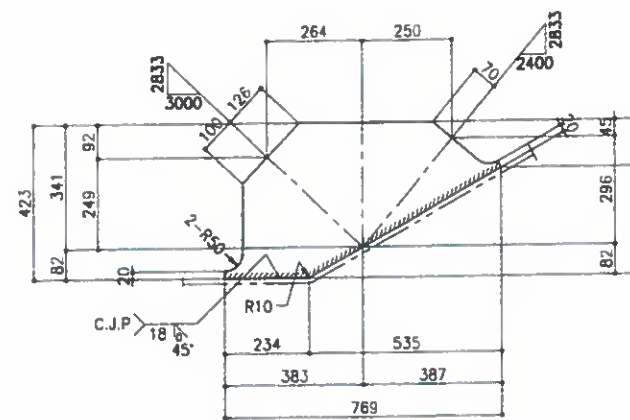
"PL20-UGP01C" DETAIL



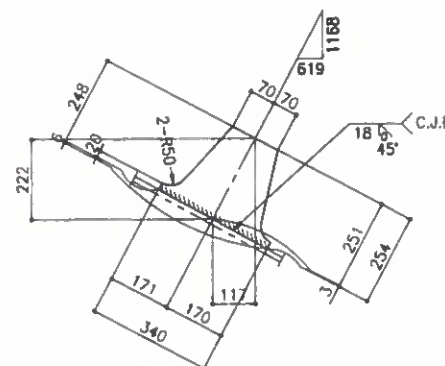
"PL20-UGP01D" DETAIL



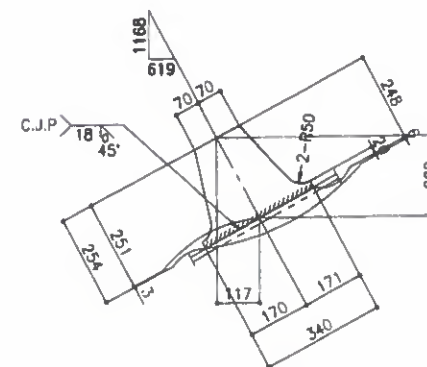
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=25, C=10 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

On hold
28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D24" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-112

REV.
A

Refer To comments on The same drawing number under submittal
RA140-32-BRG-CW-92130-A1

ON SCALE

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
D25	<DIAPHRAGM>	-	ONE			
BWU01DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL25D	PL 18*458	5946	1	385	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU05DA	PL 18*458	5080	1	329	A709M Gr.345	
BWU05DB	PL 18*458	5080	1	329	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU05DA	PL 18*1434	1564	1	317	A709M Gr.345	
BWU05DB	PL 18*1434	1564	1	317	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGPO1A	PL 20*423	769	1	51	A709M Gr.345	
LGPO1B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL05A	PL 10*200	529	2	17	A709M Gr.345	
VSL05B	PL 10*200	529	2	17	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				4988		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

92130 -> 2016-01-15
92120 -> 2015-12-28

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D25" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group
Drawing No.
RA140-22-BRG-SD-SEC-113
REV.
A

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 . C= 10 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

SECTION D25

SECT. A-A

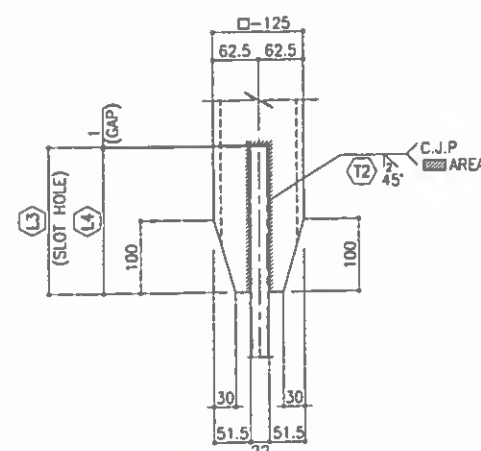
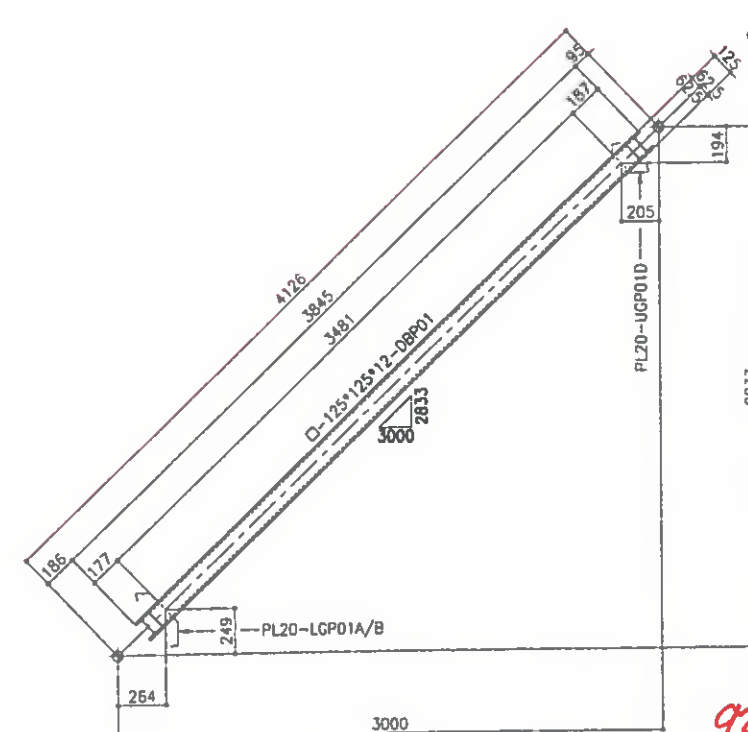
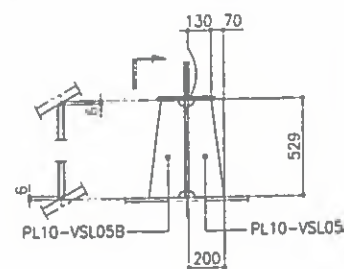
SECT. B-B

DET. #C

DET. #B

DET. #A

Refer To comments on The same drawing number
under submit tail # RA140-32-BRG-CW-92130-A1



MARK	TOP SIDE			BOT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , C= 10 mm UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HYUNDAI CONSTRUCTION GROUP

FOR CONSTRUCTION

Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

30 → 2016-01-15
20 → 2015-12-28

A	2016.02.25 FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHO	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION


دولة الكويت
MINISTRY OF PUBLIC WORKS

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
 CAUSEWAY PROJECT (MAIN LINK)
 CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
 STEEL DECK
 SECTION DETAIL "D25" (2)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROV
1 : 20	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED 2016.02.25	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

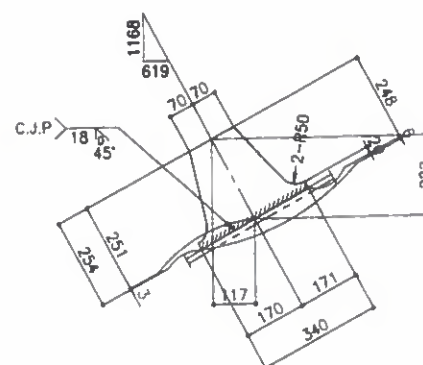
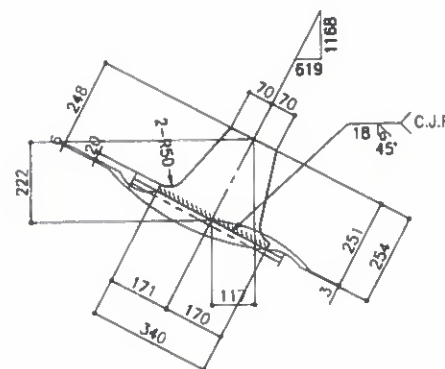
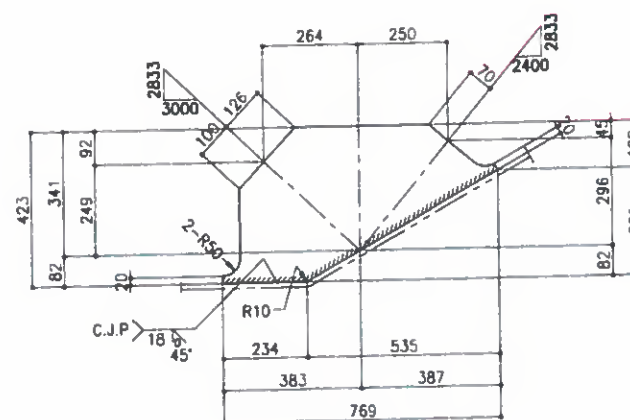
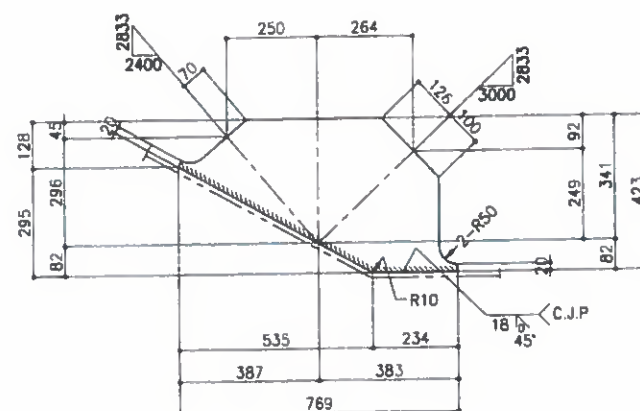
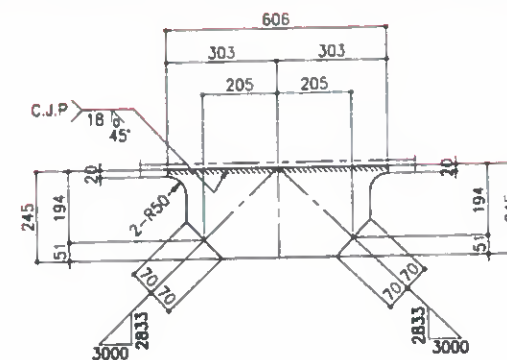
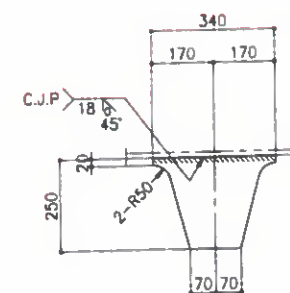
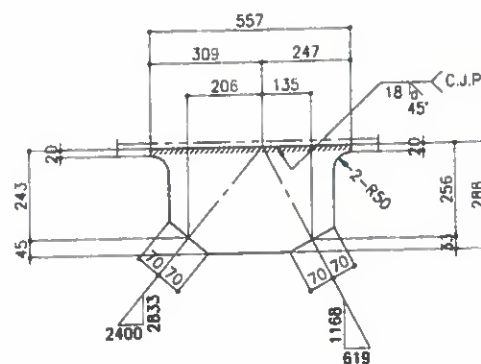
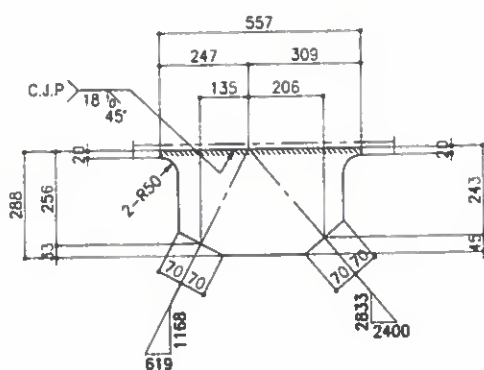

HYUNDAI
HYUNDAI CONSTRUCTION GROUP


Combined Group
Engineering Company

DRAWING NO.

RA140-22-BRG-SD-SEC-114

Refer To Comments on The same drawing number
under submittal # RA140-32BRG-CW-92130-A1



NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP $R = .35$, $C = .10$ UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



FOR CONSTRUCTION

Date : 27/02/16 Signature : M.J. LEE *[Signature]*

→ 2016-01-15
→ 2015-12-28

A	S.S.SONG FOR APPROVAL	H.I.PARK	S.S.SONG	S.M.KHO
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.
EMPLOYER				

STATE OF KUWAIT

MINISTRY OF PUBLIC WORKS

ROADS ADMINISTRATION



دولة الكويت
وزارة الأشغال العامة
إدارة الطرق

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE STEEL DECK SECTION DETAIL "D25" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHO
DATE ISSUED				
2016.02.25	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



HYUNDAI

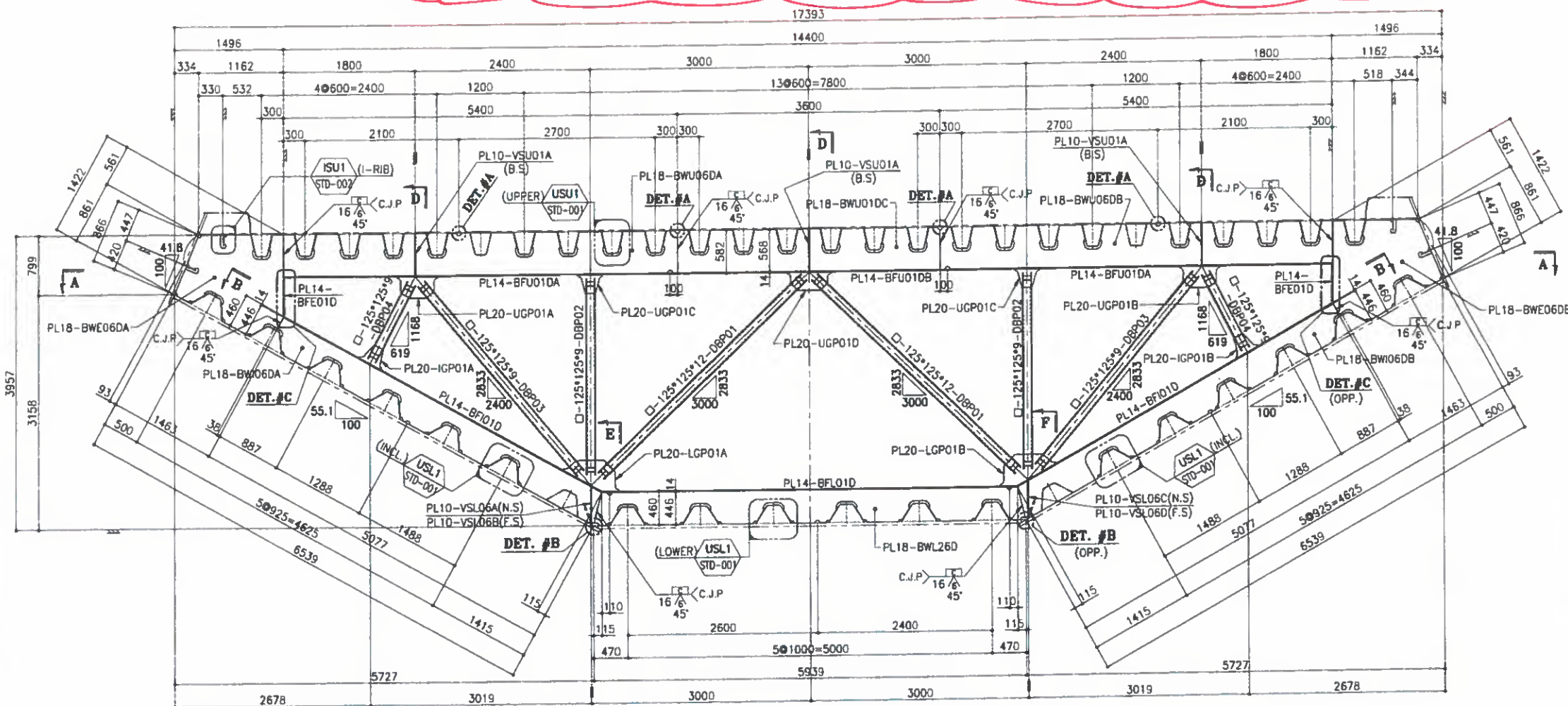
ENGINEERING & CONSTRUCTION



Combined Group
Contracting Company

DRAWING NO. RA140-22-BRG-SD-SEC-115

Refer To comments on DRW. RA140-22-BRG-SD-SEC-016-A ON SCALE



MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
D26	<DIAPHRAGM>	-	ONE			
BWU06DA	PL 18*568	5400	1	433	A709M Gr.345	
BWU06DB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01DA	PL 14*318	5300	2	370	A709M Gr.345	
BFU01DB	PL 14*318	3800	1	133	A709M Gr.345	
BWL26D	PL 18*446	5939	1	374	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU06DA	PL 18*446	5077	1	320	A709M Gr.345	
BWU06DB	PL 18*446	5077	1	320	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU06DA	PL 18*1422	1556	1	313	A709M Gr.345	
BWU06DB	PL 18*1422	1556	1	313	A709M Gr.345	
BFU01D	PL 14*318	517	2	36	A709M Gr.345	
DBP01	TB 125*125*12	3845	2	305	A500 Gr.345	
DBP02	TB 125*125*9	2642	2	164	A500 Gr.345	
DBP03	TB 125*125*9	3366	2	209	A500 Gr.345	
DBP04	TB 125*125*9	1167	2	73	A500 Gr.345	
UGP01A	PL 20*288	557	1	25	A709M Gr.345	
UGP01B	PL 20*288	557	1	25	A709M Gr.345	
UGP01C	PL 20*250	340	2	27	A709M Gr.345	
UGP01D	PL 20*245	606	1	23	A709M Gr.345	
LGP01A	PL 20*423	769	1	51	A709M Gr.345	
LGP01B	PL 20*423	769	1	51	A709M Gr.345	
IGP01A	PL 20*254	340	1	14	A709M Gr.345	
IGP01B	PL 20*254	340	1	14	A709M Gr.345	
VSU01A	PL 10*200	568	6	54	A709M Gr.345	
VSL06A	PL 10*200	515	1	8	A709M Gr.345	
VSL06B	PL 10*200	477	1	7	A709M Gr.345	
VSL06C	PL 10*200	515	1	8	A709M Gr.345	
VSL06D	PL 10*200	477	1	7	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				4949		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D26" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25
CONTRACTOR				

HYUNDAI E&S CONSTRUCTION
Combined Group

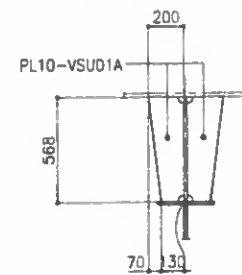
DRAWING NO.
RA140-22-BRG-SD-SEC-116
REV. A

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35, C= 10, UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

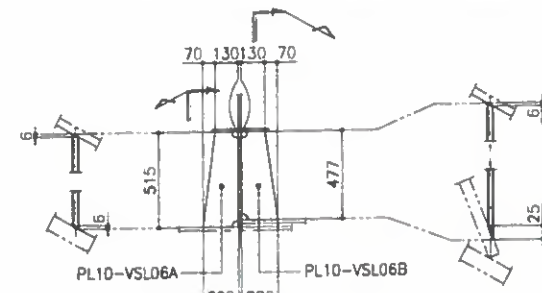
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE

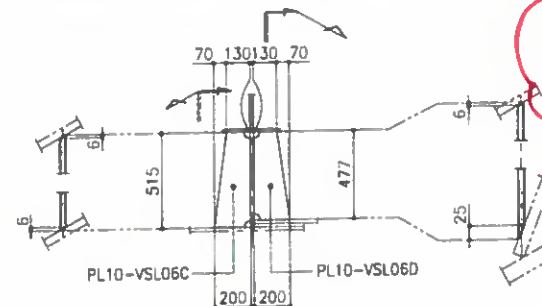
Refer To Comments on Draw. #
RA140-22-BRG-SD-SEC-017-A



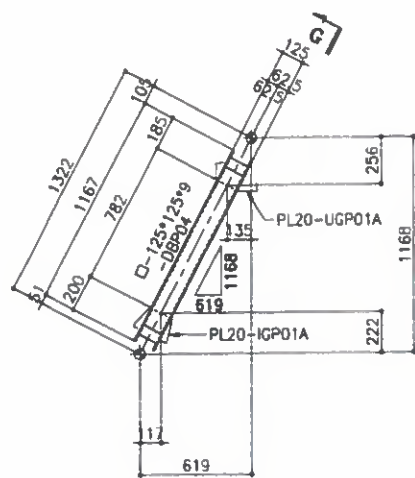
SECT. D



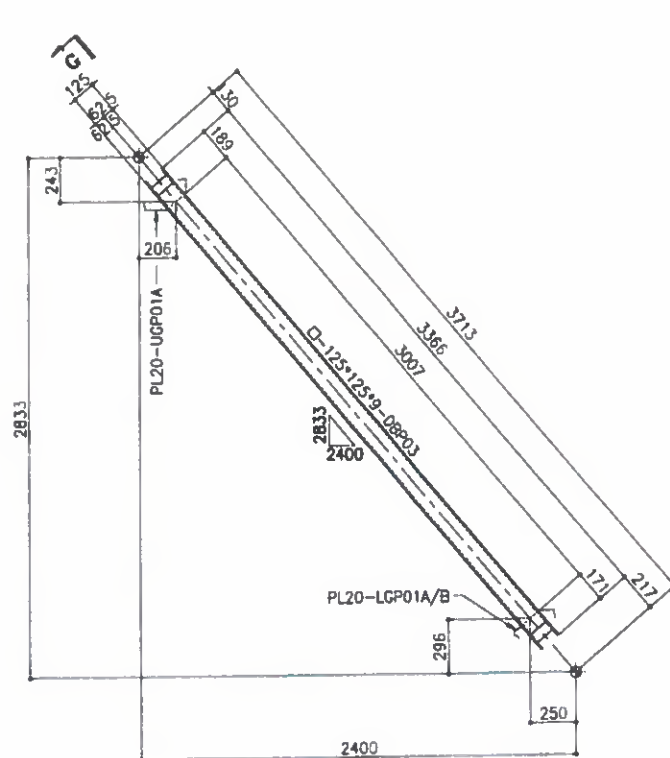
SECT. E



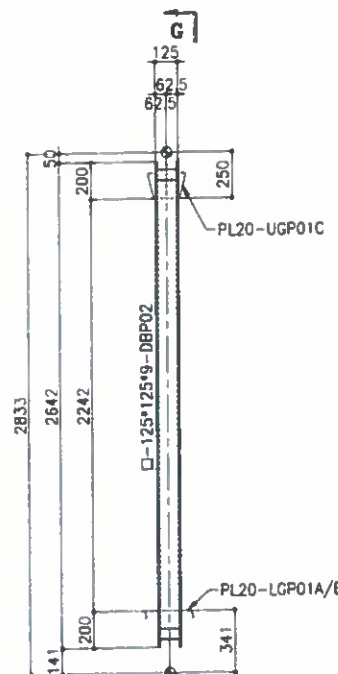
SECT. F



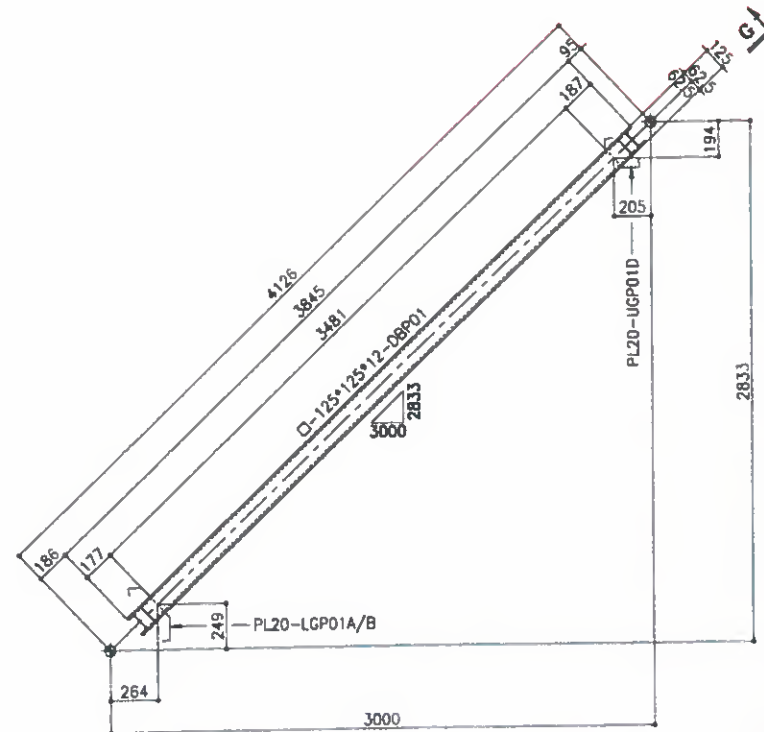
"DBP04" DETAIL
(□ -125*125*9) (2REQ'D)



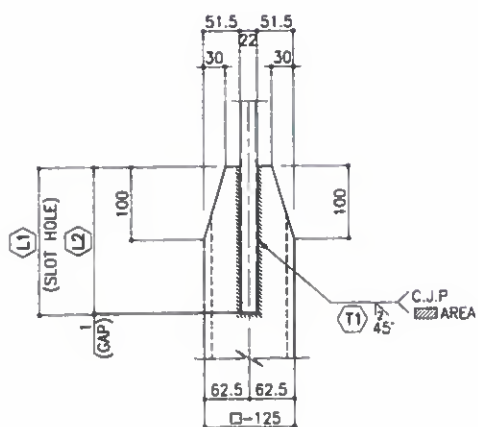
"DBP03" DETAIL
(□ -125*125*9) (2REQ'D)



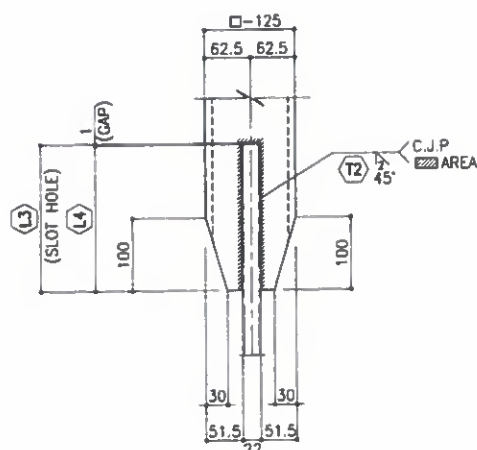
"DBP02" DETAIL
(□ -125*125*9) (2REQ'D)



"DBP01" DETAIL
(□ -125*125*12) (2REQ'D)



TOP SIDE
(SEE TABLE)



BOTT. SIDE
(SEE TABLE)

SECT. G-G
(NONE SCALE)

TABLE

MARK	TOP SIDE			BOTT. SIDE		
	(L1)	(L2)	(T1)	(L3)	(L4)	(T2)
DBP01	188	187	10	178	177	10
DBP02	201	200	7	201	200	7
DBP03	190	189	7	172	171	7
DBP04	186	185	7	201	200	7

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONG	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D26" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:20	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

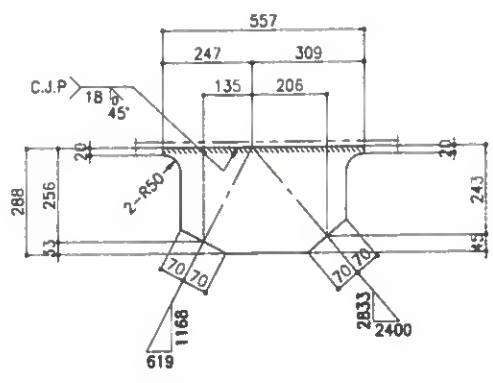
CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-SEC-117

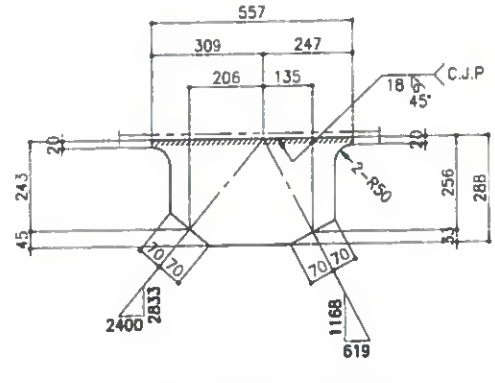
REV.
A

ON SCALE

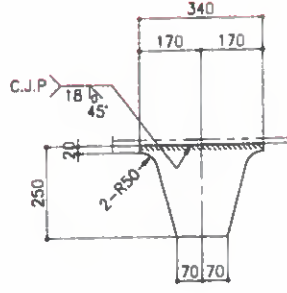
Refer To Comments on Draw. #
RA140-22-BRG-SD-SEC-01B-A



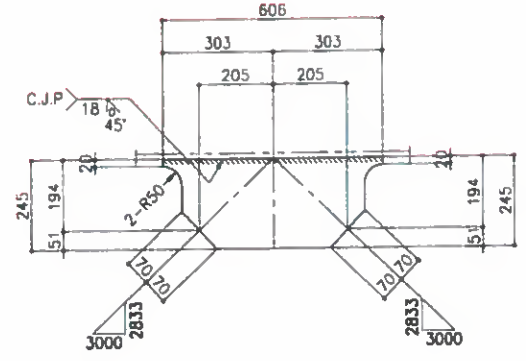
"PL20-UGP01A" DETAIL



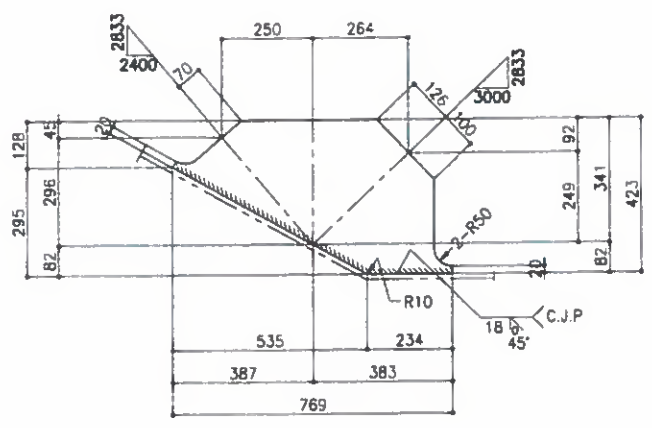
"PL20-UGP01B" DETAIL



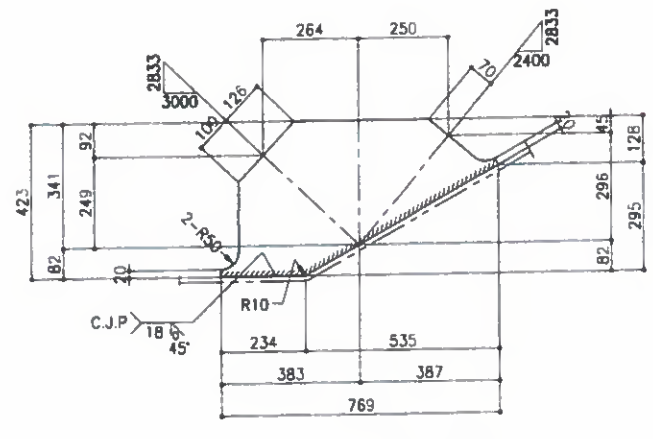
"PL20-UGP01C" DETAIL



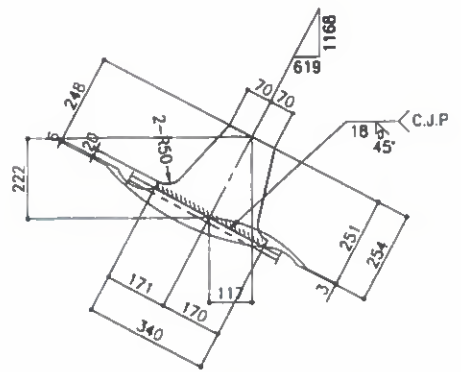
"PL20-UGP01D" DETAIL



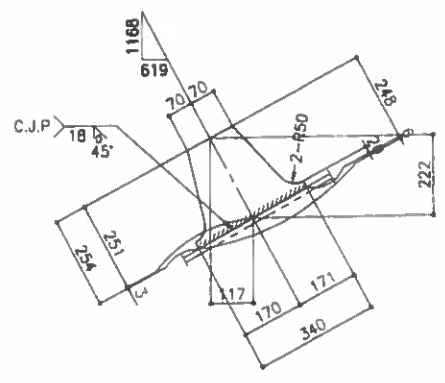
"PL20-LGP01A" DETAIL



"PL20-LGP01B" DETAIL



"PL20-IGP01A" DETAIL



"PL20-IGP01B" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

28-12-2015

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
-----	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "D26" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 10	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-118
REV.
A

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , D= 12 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To Comments under same drawing number on The
 Submittal # RA140-32-BRG-CW-DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C01W	<DAPHRAGM>	ONE				
BWU01CWA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CWB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWU01CW	PL 18*474	5953	1	399	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU01DA	PL 18*472	5088	1	339	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU01DA	PL 18*1448	1575	1	322	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DPP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				7914		

FOR CONSTRUCTION

Date : 27/02/16 Signature : M.J. LEE

SECTION D

SECTION E

SECTION F

SECTION C01W

SECTION A-A

SECTION B-B

SECTION G

SECTION H

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SLOPPED 1/8" 35° 10° UNLESS NOTED
3. ALL FILLET WELD : 1/8" 10° UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
 2016.02.25
 HYUNDAI E&S
 YOULCHON

STATE OF KUWAIT
 MINISTRY OF PUBLIC WORKS
 ROADS ADMINISTRATION

PROJECT TITLE
 SHEIKH JABER AL AHMAD AL SABAH
 CAUSEWAY PROJECT (MAIN LINK)
 CONTRACT RA/140

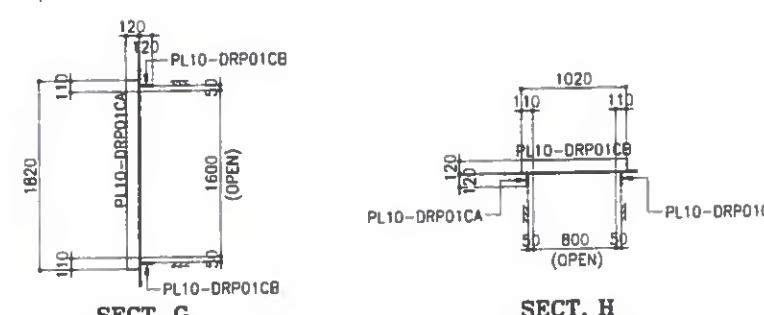
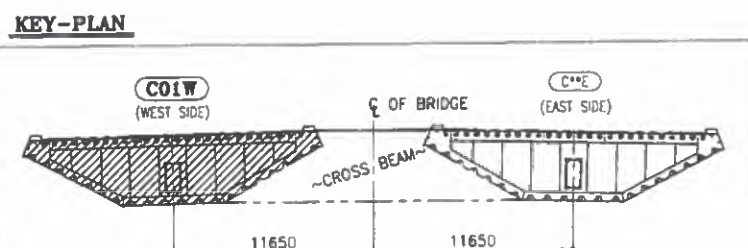
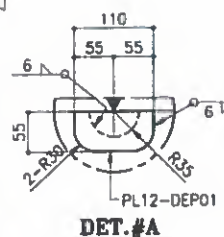
DRAWING TITLE
 MAIN BRIDGE
 STEEL DECK
 SECTION DETAIL "C01W" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
 ENGINEERING & CONSTRUCTION

DRAWING NO.
 RA140-22-BRG-SD-SEC-201

REV.
 A

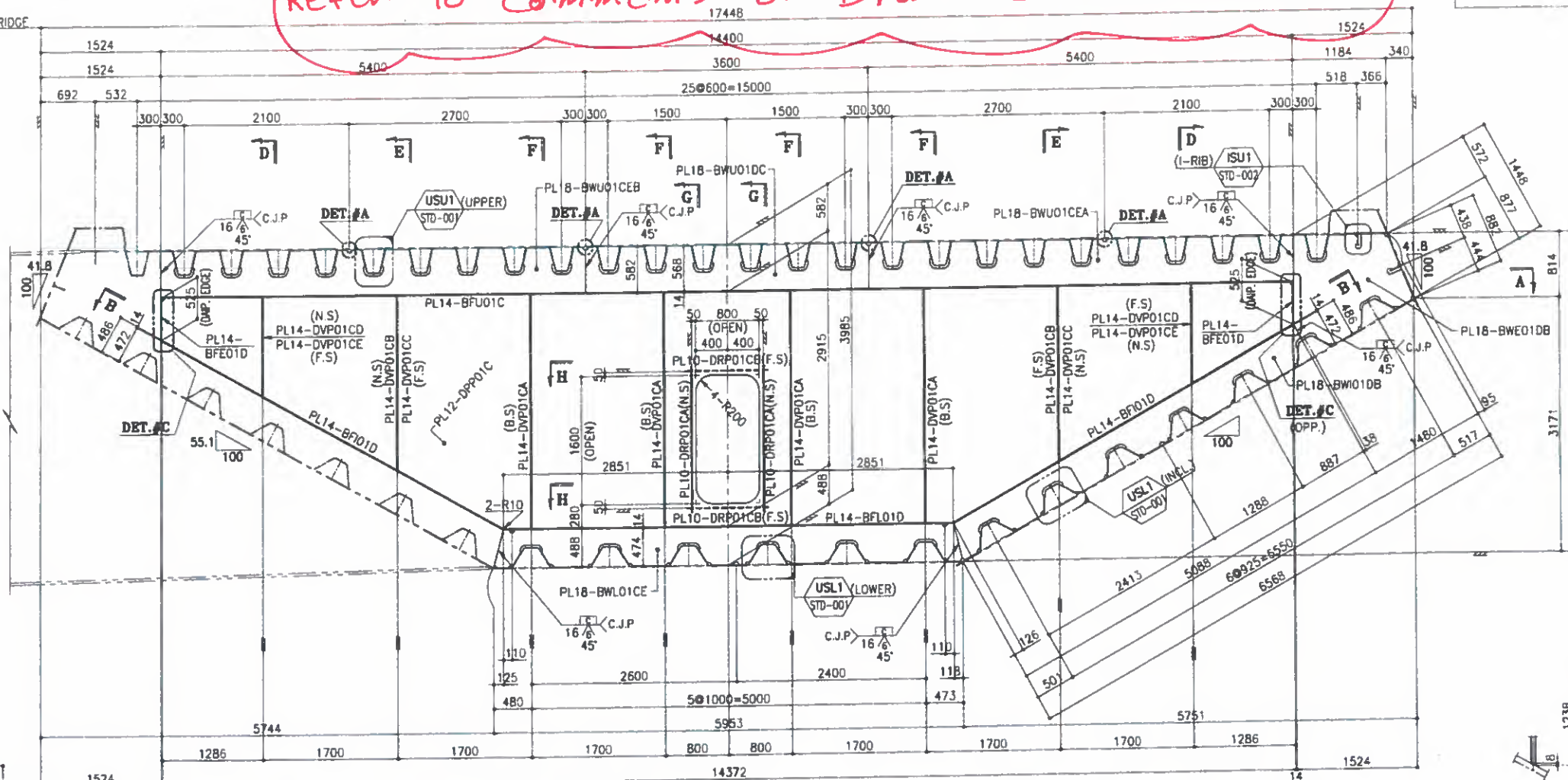


Refer To Comments on Draw. SD-SEC-201-A

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
CD1E	<DIAPHRAGM>	CNE				
BWU01CEA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CEB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWU01CE	PL 18*474	5953	1	399	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU01DB	PL 18*472	5088	1	339	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWU01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFL01D	PL 14*318	517	2	36	A709M Gr.345	
DPP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				7914		



SECTION C01E

SECTION A-A

SECTION B-B

SECTION G

SECTION H

SECTION D

SECTION E

SECTION F

SECTION C

28-12-2015

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=10 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION	
PROJECT TITLE SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140	
DRAWING TITLE MAIN BRIDGE STEEL DECK SECTION DETAIL "C01E" (1)	
SCALE 1 : 35	DATE ISSUED 2016.02.25
DRAWN H.I.PARK	DESIGNED K.W.CHOI
CHECKED S.S.SON	APPROVED S.M.KHON
CONTRACTOR HYUNDAI ENGINEERING & CONSTRUCTION Combined Group	
DRAWING NO. RA140-22-BRG-SD-SEC-202	
REV. A	

Refer To comments on The same drawing number under submittal.
RA140-32 - BRG-CW-DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
CO2W	<DIAPHRAGM>	ONE				
BWU01CWA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CWB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWU02CW	PL 18*458	5954	1	385	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU09DA	PL 18*458	5080	1	329	A709M Gr.345	
BFL01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE05DA	PL 18*1434	1564	1	317	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DPP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				7884		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

SECTION D

SECTION E

SECTION F

28-12-2015 → 92120
15-01-2016 → 92130

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.D.N. UNLESS NOTED
2. SLOTTED R=35, O=10 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO. RA140-22-BRG-SD-SEC-203
REV. A

SECTION C02W

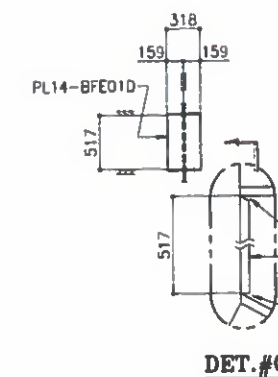
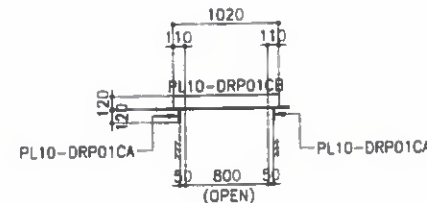
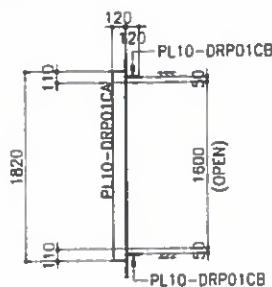
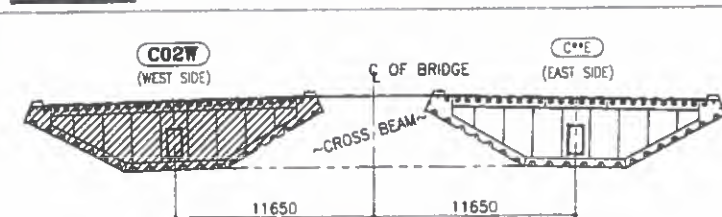
SECTION A-A

SECTION B-B

SECTION G

SECTION H

KEY-PLAN



DET. #C

DET. #B

DET. #A

DET. #A

DET. #B

DET. #A

DET. #C

DET. #A

DET. #B

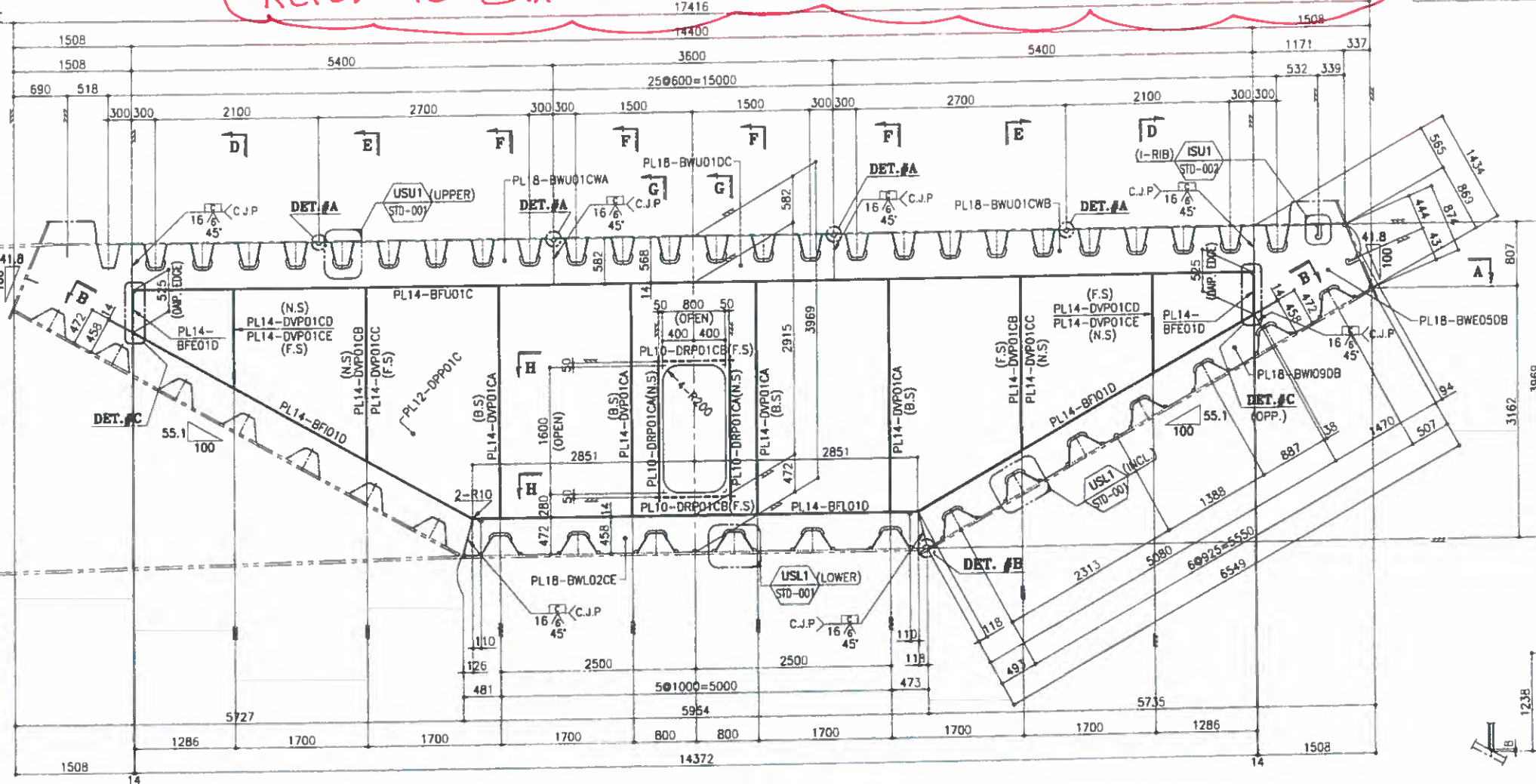
DET. #C

Refer To comments on DWG. #SD-SEC-203-A

ON SCALE

BILL OF MATERIALS

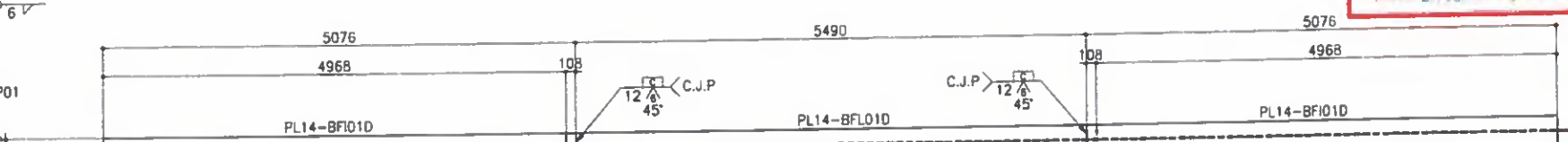
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
CO2E	<DIAPHRAGM>	ONE				
BWU01CE	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWU02CE	PL 18*458	5954	1	385	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU09DB	PL 18*458	5080	1	329	A709M Gr.345	
BFI01D	PL 14*318	5076	2	355	A709M Gr.345	
BWE05DB	PL 18*1434	1564	1	317	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DPP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL =				7884		



SECTION C02E



SECTION A-A



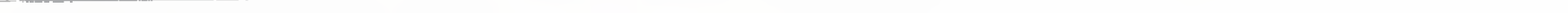
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

SECTION F-F

SECTION G-G

SECTION H-H

SECTION I-I

SECTION J-J

SECTION K-K

SECTION L-L

SECTION M-M

SECTION N-N

SECTION O-O

SECTION P-P

SECTION Q-Q

SECTION R-R

SECTION S-S

SECTION T-T

SECTION U-U

SECTION V-V

SECTION W-W

SECTION X-X

SECTION Y-Y

SECTION Z-Z

SECTION AA-AA

SECTION BB-BB

SECTION CC-CC

SECTION DD-DD

SECTION EE-EE

SECTION FF-FF

SECTION GG-GG

SECTION HH-HH

SECTION II-II

SECTION JJ-JJ

SECTION KK-KK

SECTION LL-LL

SECTION MM-MM

SECTION NN-NN

SECTION OO-OO

SECTION PP-PP

SECTION QQ-QQ

SECTION RR-RR

SECTION SS-SS

SECTION TT-TT

SECTION UU-UU

SECTION VV-VV

SECTION WW-WW

SECTION XX-XX

SECTION YY-YY

SECTION ZZ-ZZ

SECTION AA-AA

SECTION BB-BB

SECTION CC-CC

SECTION DD-DD

SECTION EE-EE

SECTION FF-FF

SECTION GG-GG

SECTION HH-HH

SECTION II-II

SECTION JJ-JJ

SECTION KK-KK

SECTION LL-LL

SECTION MM-MM

SECTION NN-NN

SECTION OO-OO

SECTION PP-PP

SECTION QQ-QQ

SECTION RR-RR

SECTION SS-SS

SECTION TT-TT

SECTION UU-UU

SECTION VV-VV

SECTION WW-WW

SECTION XX-XX

SECTION YY-YY

SECTION ZZ-ZZ

SECTION AA-AA

SECTION BB-BB

SECTION CC-CC

SECTION DD-DD

SECTION EE-EE

SECTION FF-FF

SECTION GG-GG

SECTION HH-HH

SECTION II-II

SECTION JJ-JJ

SECTION KK-KK

SECTION LL-LL

SECTION MM-MM

SECTION NN-NN

SECTION OO-OO

SECTION PP-PP

SECTION QQ-QQ

SECTION RR-RR

SECTION SS-SS

SECTION TT-TT

SECTION UU-UU

Refer To comments under same drawing number on
The Submittal # RA140-32-BRG-CW-DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
C03W	<DIAPHRAGM>	-	ONE			
BWU01CWA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CWB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWL03CW	PL 18*474	5953	1	399	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU07DA	PL 18*472	5088	1	339	A709M Gr.345	
BFU01D	PL 14*318	5076	2	355	A709M Gr.345	
BWED1DA	PL 18*1448	1575	1	322	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
DPP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
	S.TOTAL			7914		

FOR CONSTRUCTION

Date : 27/02/16 Signature : M.J. LEE

SECTION D

SECTION E

SECTION F

SECTION C03W

SECTION A-A

SECTION B-B

SECTION G

SECTION H

DET. #C

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=30, C=10, UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{4}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROV.

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

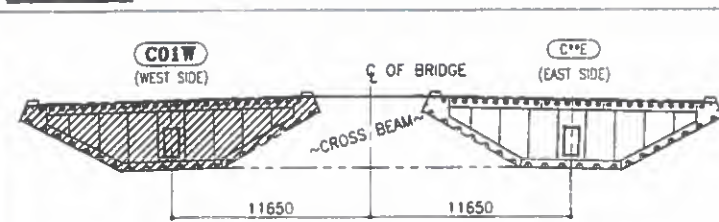
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C03W" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.L.PARK	K.W.CHON	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-205
REV.
A

KEY-PLAN

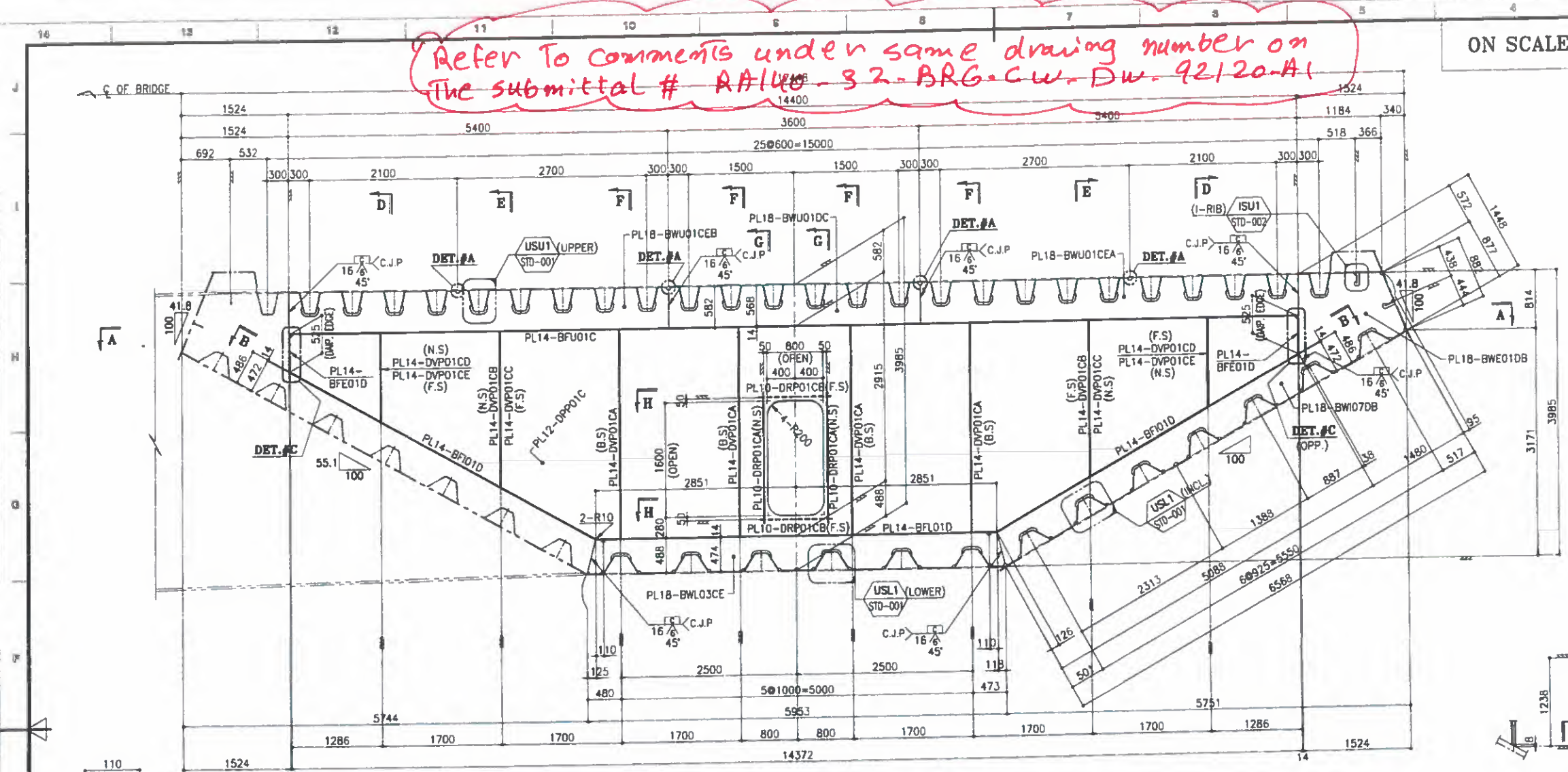


Refer To comments under same drawing number on
The submittal # RA140-32-BRG-CW-DW-92120-A1

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
CO3E	<DIAPHRAGM>	-	ONE			
BWU01CEA	PL 18*568	5400	1	433	A709M Gr.345	
BWU01CEB	PL 18*568	5400	1	433	A709M Gr.345	
BWU01DC	PL 18*568	3600	1	289	A709M Gr.345	
BFU01C	PL 14*318	14400	1	503	A709M Gr.345	
BWL03CE	PL 18*474	5953	1	399	A709M Gr.345	
BFL01D	PL 14*318	5490	1	192	A709M Gr.345	
BWU07DB	PL 18*472	5088	1	339	A709M Gr.345	
BFO1D	PL 14*318	5076	2	355	A709M Gr.345	
BWU01DB	PL 18*1448	1575	1	322	A709M Gr.345	
BFO1D	PL 14*318	517	2	36	A709M Gr.345	
DRP01C	PL 12*2915	14372	1	3946	A709M Gr.345	
DVP01CA	PL 14*150	2915	8	384	A709M Gr.345	
DVP01CB	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CC	PL 14*150	2175	2	72	A709M Gr.345	
DVP01CD	PL 14*150	1238	2	41	A709M Gr.345	
DVP01CE	PL 14*150	1238	2	41	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				7914		



SECTION C03E

SECTION A-A

SECTION B-B

SECTION G

SECTION H

SECTION D

SECTION E

SECTION F

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R 35. > 10 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

28-12-2015

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

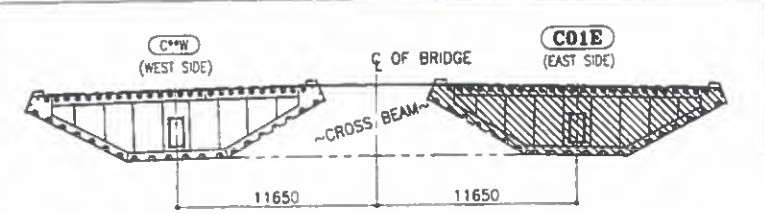
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C03E" (1)

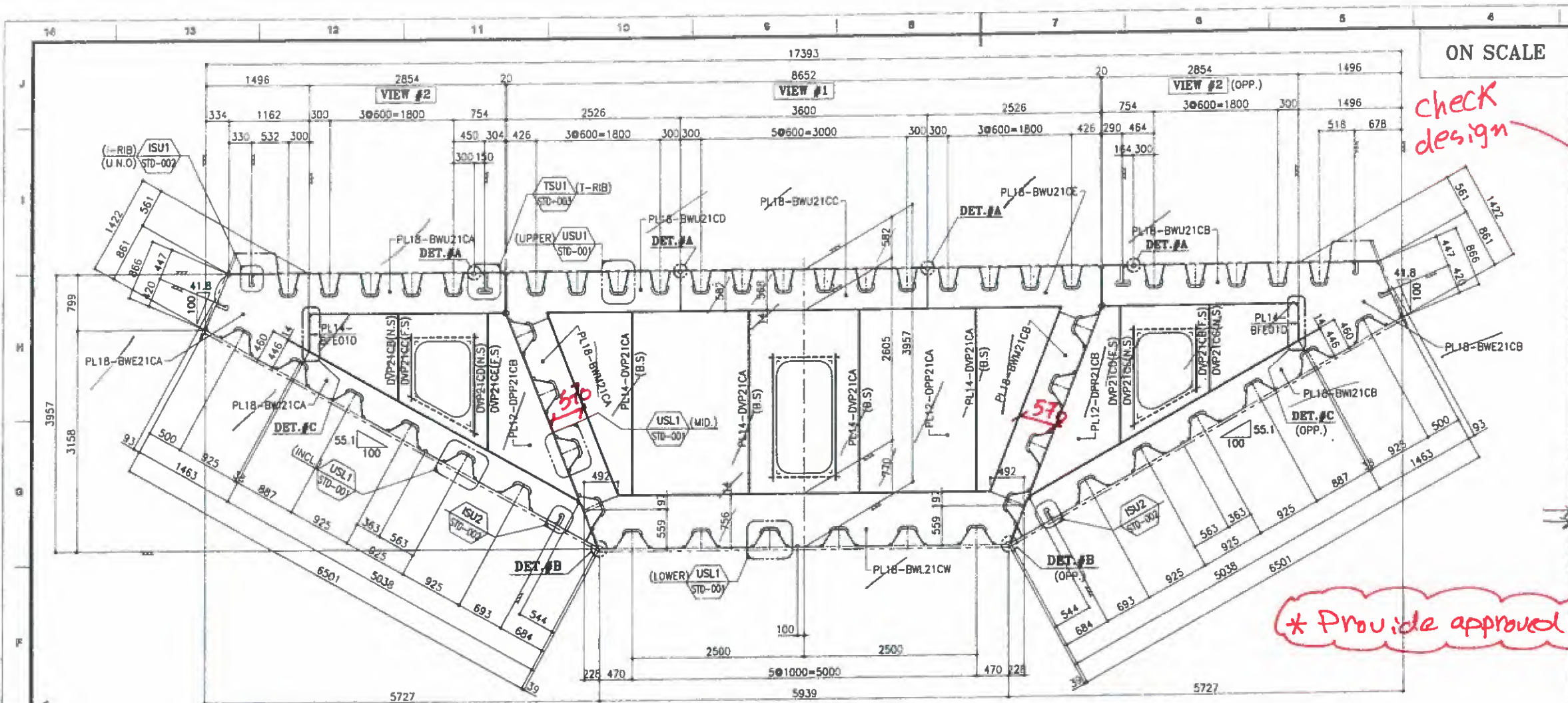
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group Contracting Company

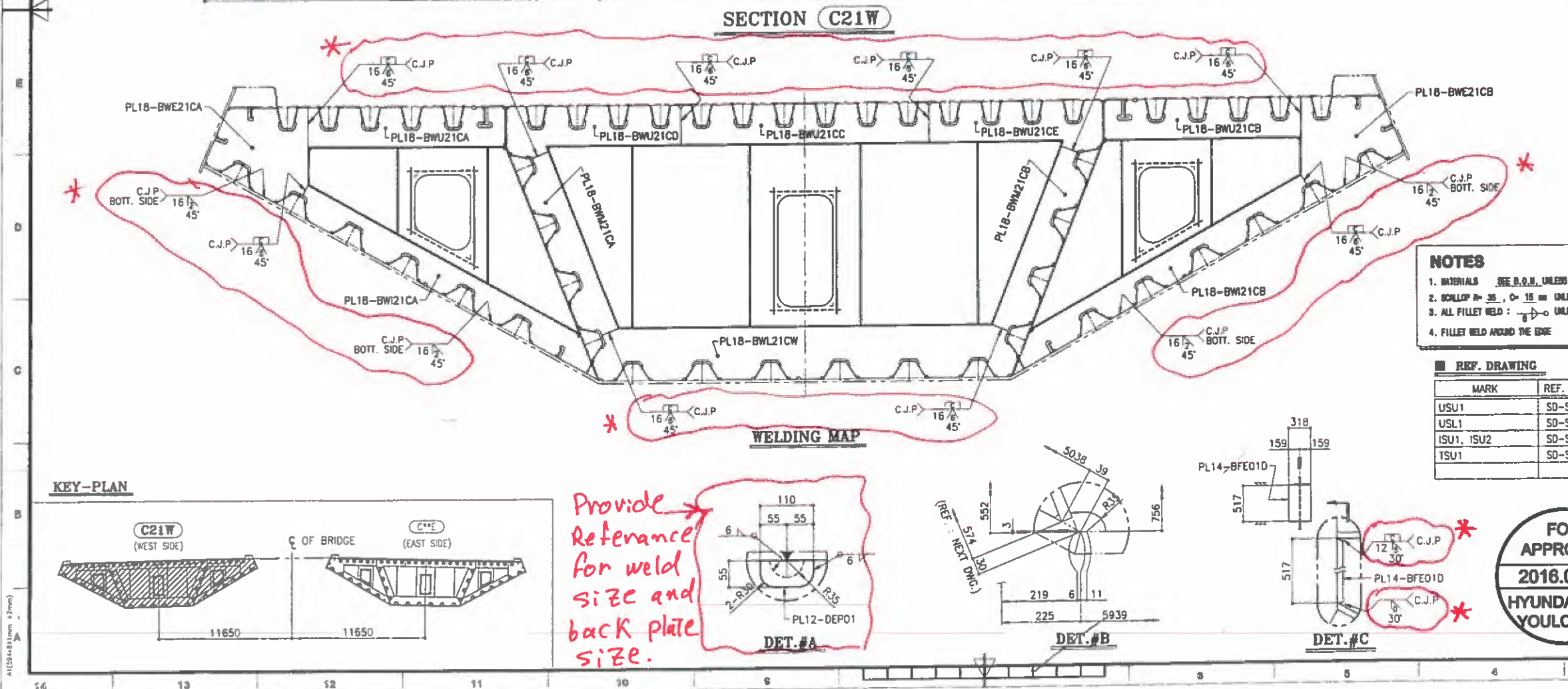
DRAWING NO.
RA140-22-BRG-SD-SEC-206
REV. A

KEY-PLAN





BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK
C21W	<DIAPHRAGM>	-	ONE		
BWU21CA	PL 18*568	2854	1	229	A709M Gr.345
BWU21CB	PL 18*568	2854	1	229	A709M Gr.345
BWU21CC	PL 18*568	3600	1	289	A709M Gr.345
BWU21CD	PL 18*850	2526	1	303	A709M Gr.345
BWU21CE	PL 18*850	2526	1	303	A709M Gr.345
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345
BFU21CB	PL 14*318	2854	2	199	A709M Gr.345
BWL21CW	PL 18*756	6396	1	683	A709M Gr.345
BFL21C	PL 14*318	5423	1	190	A709M Gr.345
BWU21CA	PL 18*446	5038	1	317	A709M Gr.345
BWU21CB	PL 18*446	5038	1	317	A709M Gr.345
BFL21C	PL 14*318	4501	2	315	A709M Gr.345
BWE21CA	PL 18*1422	1556	1	313	A709M Gr.345
BWE21CB	PL 18*1422	1556	1	313	A709M Gr.345
BFE01D	PL 14*318	517	2	36	A709M Gr.345
BWU21CA	PL 18*530	2744	1	205	A709M Gr.345
BWU21CB	PL 18*530	2744	1	205	A709M Gr.345
BFW21C	PL 14*318	2806	2	196	A709M Gr.345
DPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345
DVP21CA	PL 14*150	2605	8	344	A709M Gr.345
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345
DPP21CB	PL 12*2682	3913	2	1977	A709M Gr.345
DVP21CB	PL 14*150	1238	2	41	A709M Gr.345
DVP21CC	PL 14*150	1238	2	41	A709M Gr.345
DVP21CD	PL 14*150	1955	2	64	A709M Gr.345
DVP21CE	PL 14*150	1955	2	64	A709M Gr.345
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345
DRP21CA	PL 10*120	1155	2	22	A709M Gr.345
DRP21CB	PL 10*120	980	2	18	A709M Gr.345
DRP21CC	PL 10*120	1481	2	28	A709M Gr.345
DEP01	PL 12*55	110	4	2	A709M Gr.345
S.TOTAL =				9416	



FOR CONSTRUCTION

Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPROD.
A	2016.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S.M. KHORRAM

EMPLOYER: STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE: SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE: MAIN BRIDGE STEEL DECK
SECTION DETAIL "C21W" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHORRAM

DATE ISSUED: 2016.02.25
CONTRACTOR: HYUNDAI E&S YOUNGCHON

FOR APPROVAL

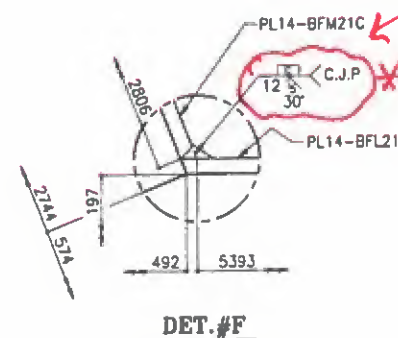
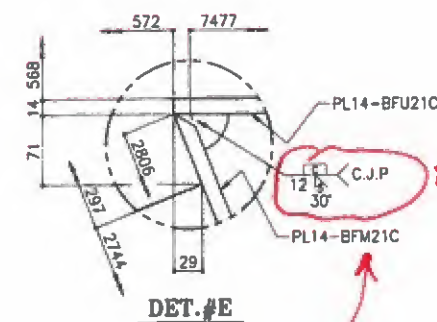
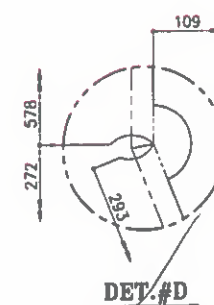
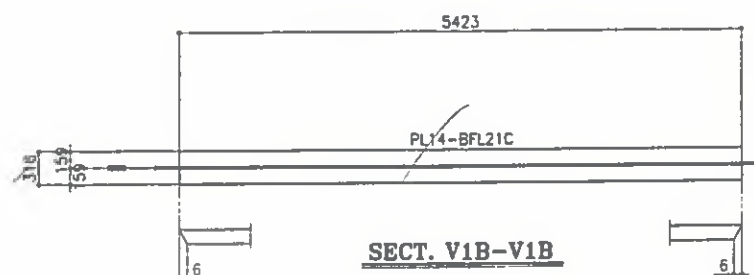
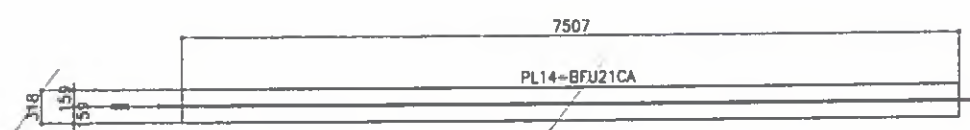
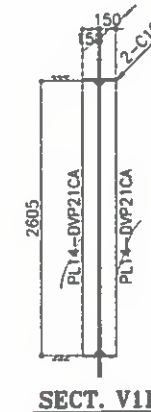
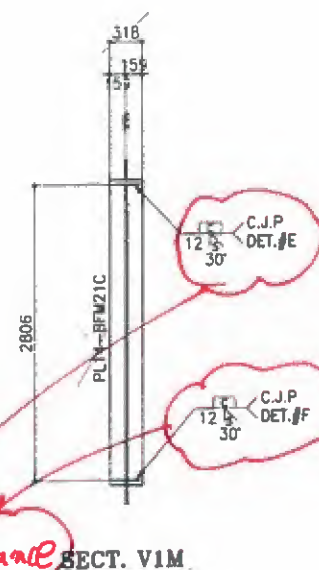
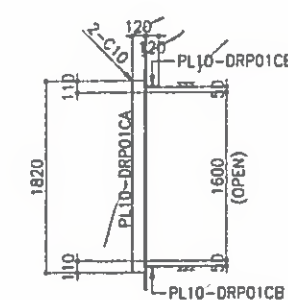
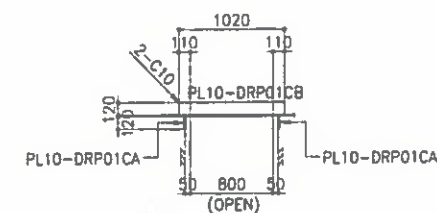
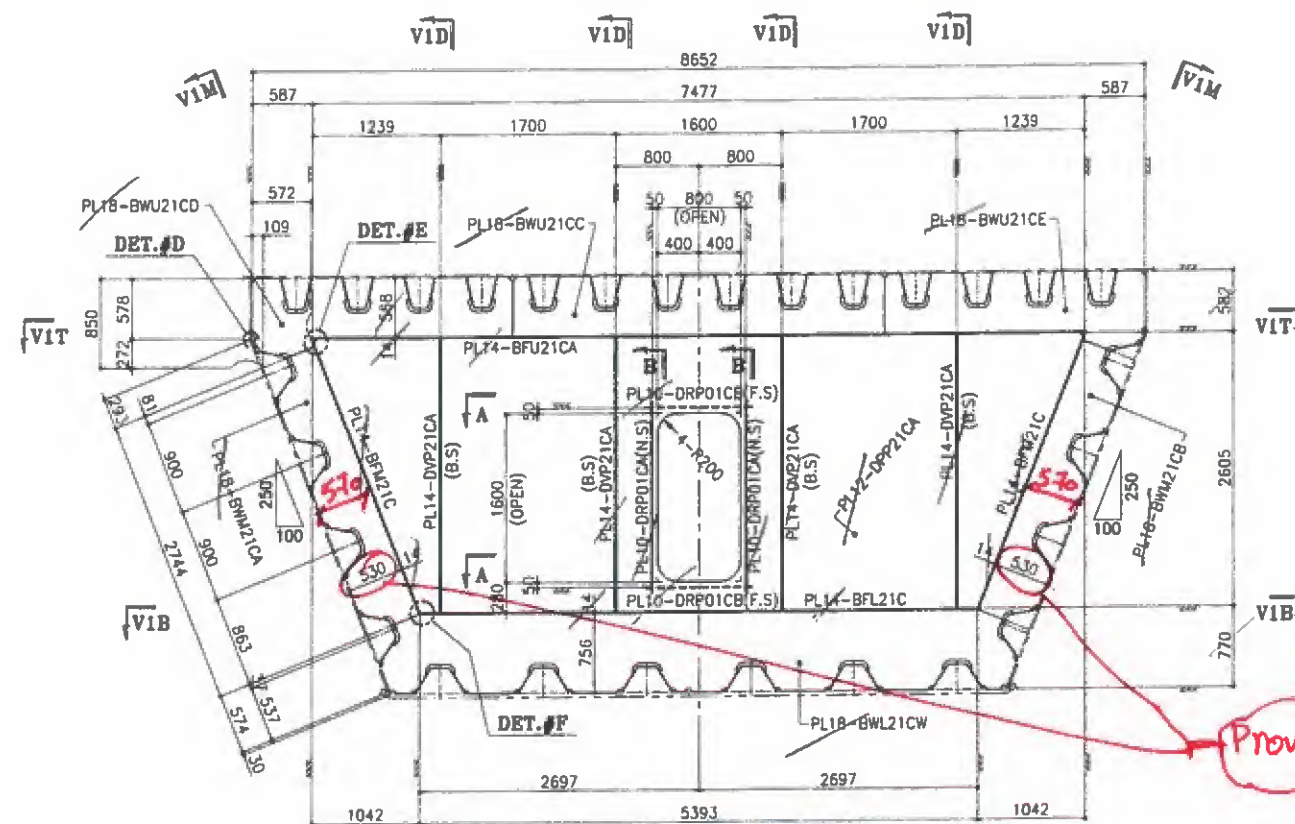
2016.02.25

HYUNDAI E&S YOUNGCHON

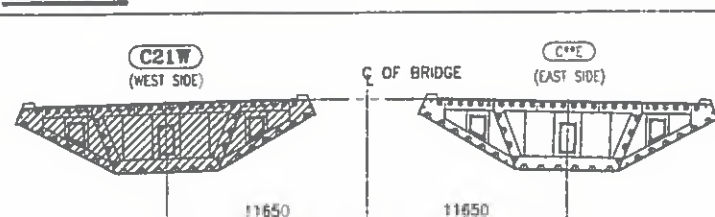
DRAWING NO. RA140-22-BRG-SD-SEC-221
REV. A

A1(254x11mm: 23mm)

ON SCALE



KEY-PLAN



REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP IN 35, 0= 15 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	HUNDAI	S.S. SON	S.M. KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C21W" (2)

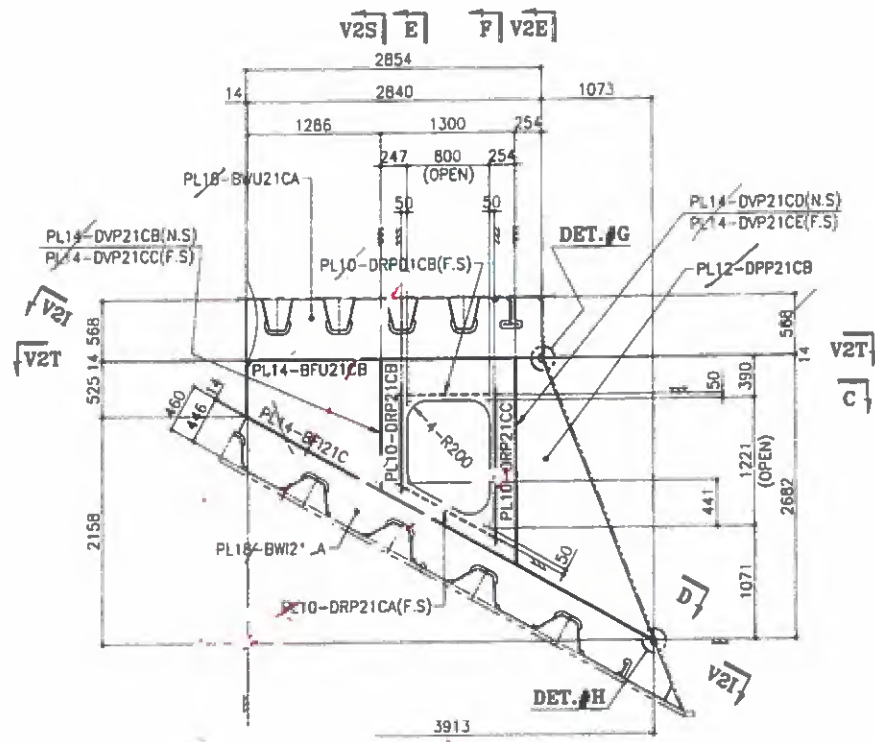
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
Combined Group
Construction Company

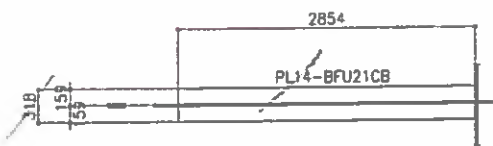
DRAWING NO.
RA140-22-BRG-SD-SEC-222

REV.
A

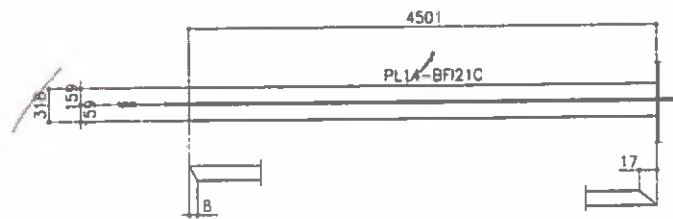
ON SCALE



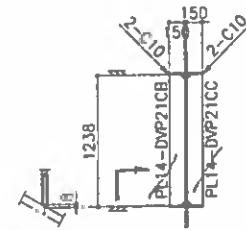
VIEW #2



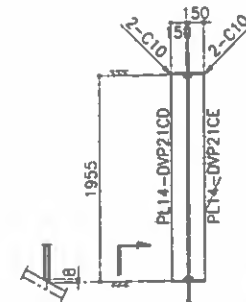
SECT. V2T-V2T



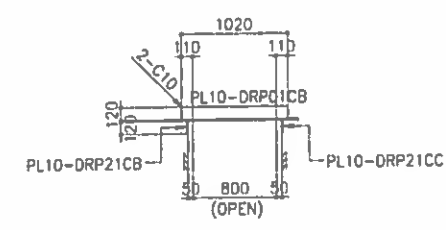
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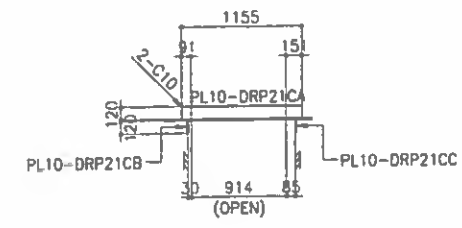
SECT. V2S



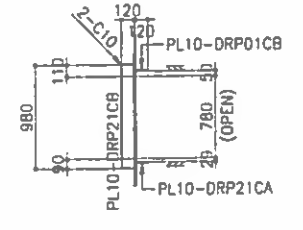
SECT. V2E



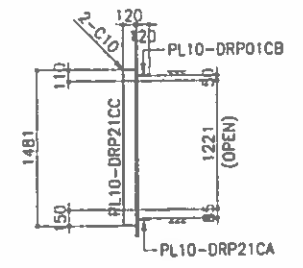
SECT. C



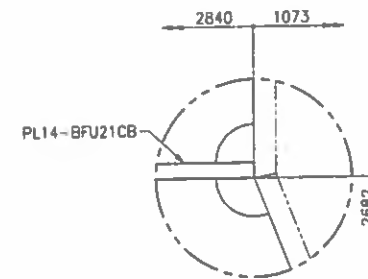
SECT. D



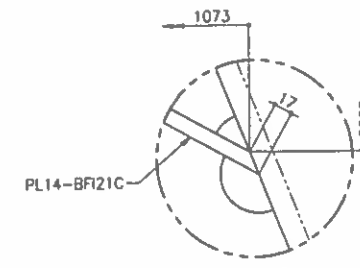
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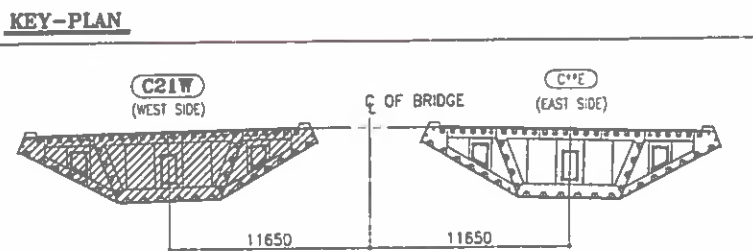
SECT. F



DET.#G



DET.#H



KEY-PLAN

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

- ## NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R- 35 , ϕ 18 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *M.J. Lee*

A	2018.02.25	FOR APPROVAL	H.I. PARK	S.S. SONG	S. LINDEN
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SECTION DETAIL "C21W" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SONH	S.M.KHOH
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



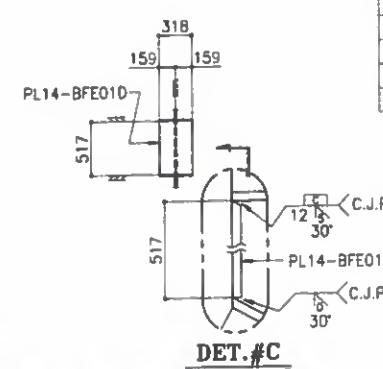
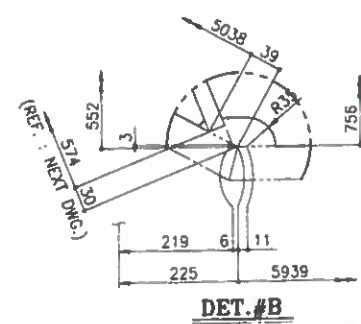
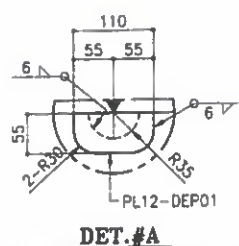
DRAWING NO.

RA140-22-BRG-SD-SEC-223

EV

14

ON SCALE

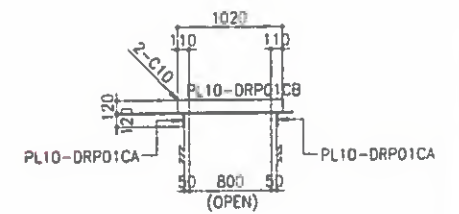


DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-224	A

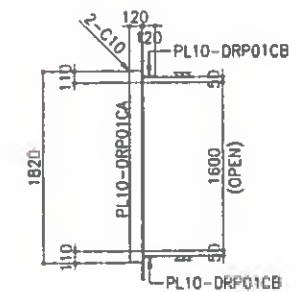
MARK	REF. DWG. NO.;
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ON SCALE



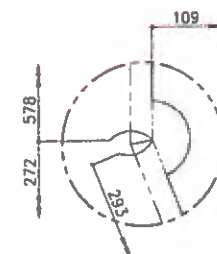
SECT. A



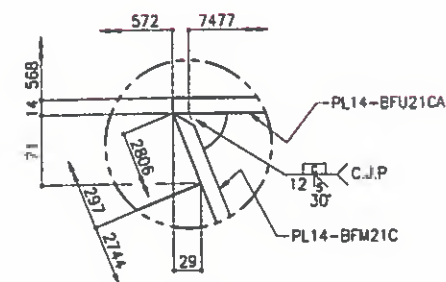
SECT. B

SECT. V1M

SECT. V1D

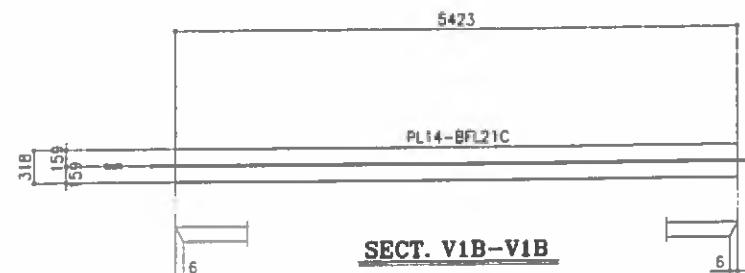


DET.#D

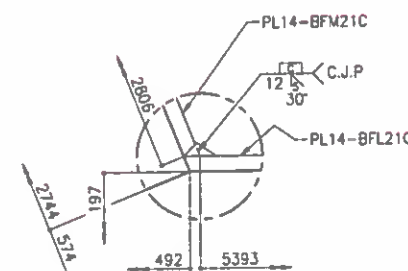


DET.#E

SECT. V1T-V1T

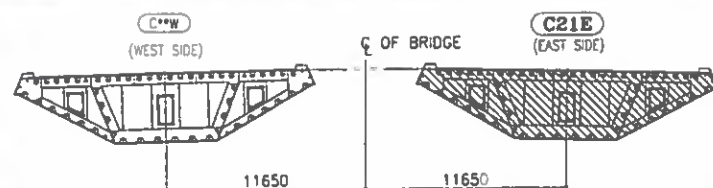


SECT. V1B-V1B



DET.#F

KEY-PLAN



MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *M.J. Lee*

A	2018.02.25	FOR APPROVAL	KLPARK	11.5%	5.10%
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C21E" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARKAR	K.W.CHOW	S.S.SOM	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR


Combined Group
 Contracting Company

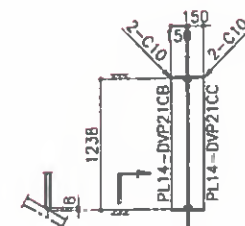
DRAWING NO.

RA140-22-BRG-SD-SEC-225

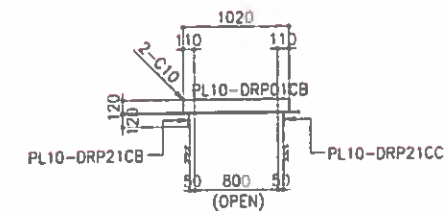
25

A | x

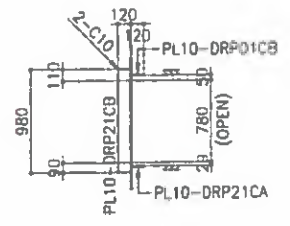
ON SCALE



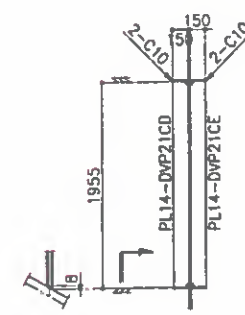
SECT. V2S



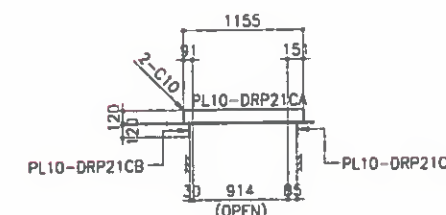
SECT. C



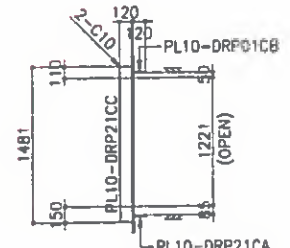
SECT. E



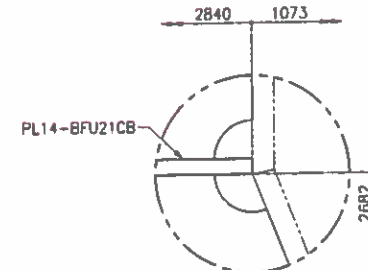
SECT. V2E



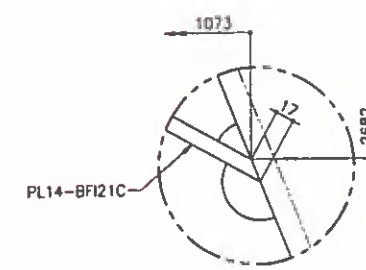
SECT. D



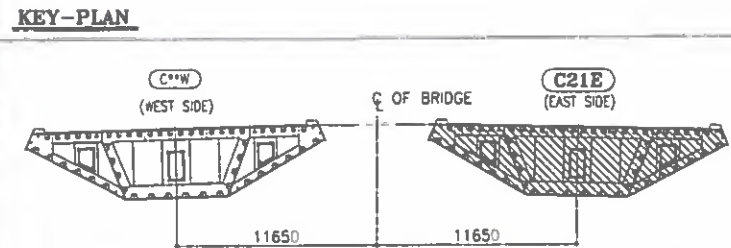
SECT. F



DET.#G



DET.#H



KEY-PLAN

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

- ## NOTES
1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP $\approx \frac{35}{16}$  UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

A	28 FEB 75	FOR APPROVAL	HJ PARKER	T.S. SONG	SALVAGE
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROVED

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C21E" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

 **HYUNDAI**
Engineering & Construction

 **Combined Group**
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-226	A

Provide approved Reference

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C22W	<DIAPHRAGM>	ONE				
BWU21CA	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CB	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CC	PL 18*568	3600	1	289	A709M Gr.345	
BWU22CD	PL 18*843	2506	1	299	A709M Gr.345	
BWU22CE	PL 18*843	2506	1	299	A709M Gr.345	
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345	
BFU21CB	PL 14*318	2854	2	199	A709M Gr.345	
BWL22CW	PL 18*756	6359	1	679	A709M Gr.345	
BFL21C	PL 14*318	5423	1	190	A709M Gr.345	
BW22CA	PL 18*446	5038	1	317	A709M Gr.345	
BW22CB	PL 18*446	5038	1	317	A709M Gr.345	
BFL21C	PL 14*318	4501	2	315	A709M Gr.345	
BWE21CA	PL 18*1422	1556	1	313	A709M Gr.345	
BWE21CB	PL 18*1422	1556	1	313	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
BWU22CA	PL 18*510	2744	1	198	A709M Gr.345	
BWU22CB	PL 18*510	2744	1	198	A709M Gr.345	
BFL21C	PL 14*318	2806	2	196	A709M Gr.345	
DPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345	
DVP21CA	PL 14*150	2605	8	344	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DPP21CB	PL 12*2682	3913	2	1977	A709M Gr.345	
DVP21CB	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CC	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CD	PL 14*150	1955	2	64	A709M Gr.345	
DVP21CE	PL 14*150	1955	2	64	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP21CA	PL 10*120	1155	2	22	A709M Gr.345	
DRP21CB	PL 10*120	980	2	18	A709M Gr.345	
DRP21CC	PL 10*120	1481	2	28	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				9387		

SECTION C22W

* Provide approved Reference

HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

A 2016.02.25 FOR APPROVAL		H.I.PARK S.S.SON S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION	APPRO.
EMPLOYER			
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION			
PROJECT TITLE			
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140			
DRAWING TITLE			
MAIN BRIDGE STEEL DECK			
SECTION DETAIL "C22W" (1)			
SCALE	DRAWN	DESIGNED	CHECKED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25
CONTRACTOR			
HYUNDAI ENGINEERING & CONSTRUCTION			
DRAWING NO.			
RA140-22-BRG-SD-SEC-227			
REV.			
A			

NOTES

1. MATERIALS SEE D.O.B. UNLESS NOTED
2. SCALLOP R= 35 , D= 15 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

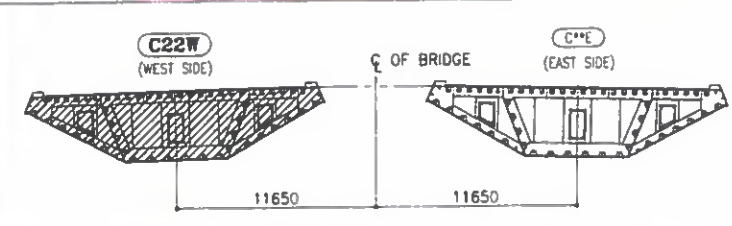
REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

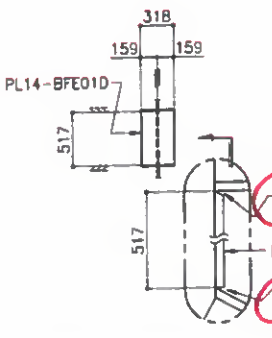
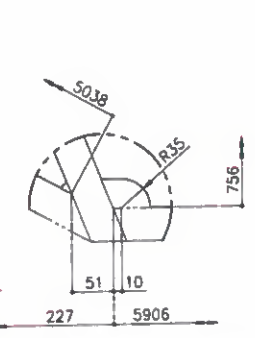
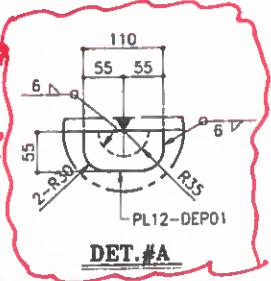
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

WELDING MAP

KEY-PLAN

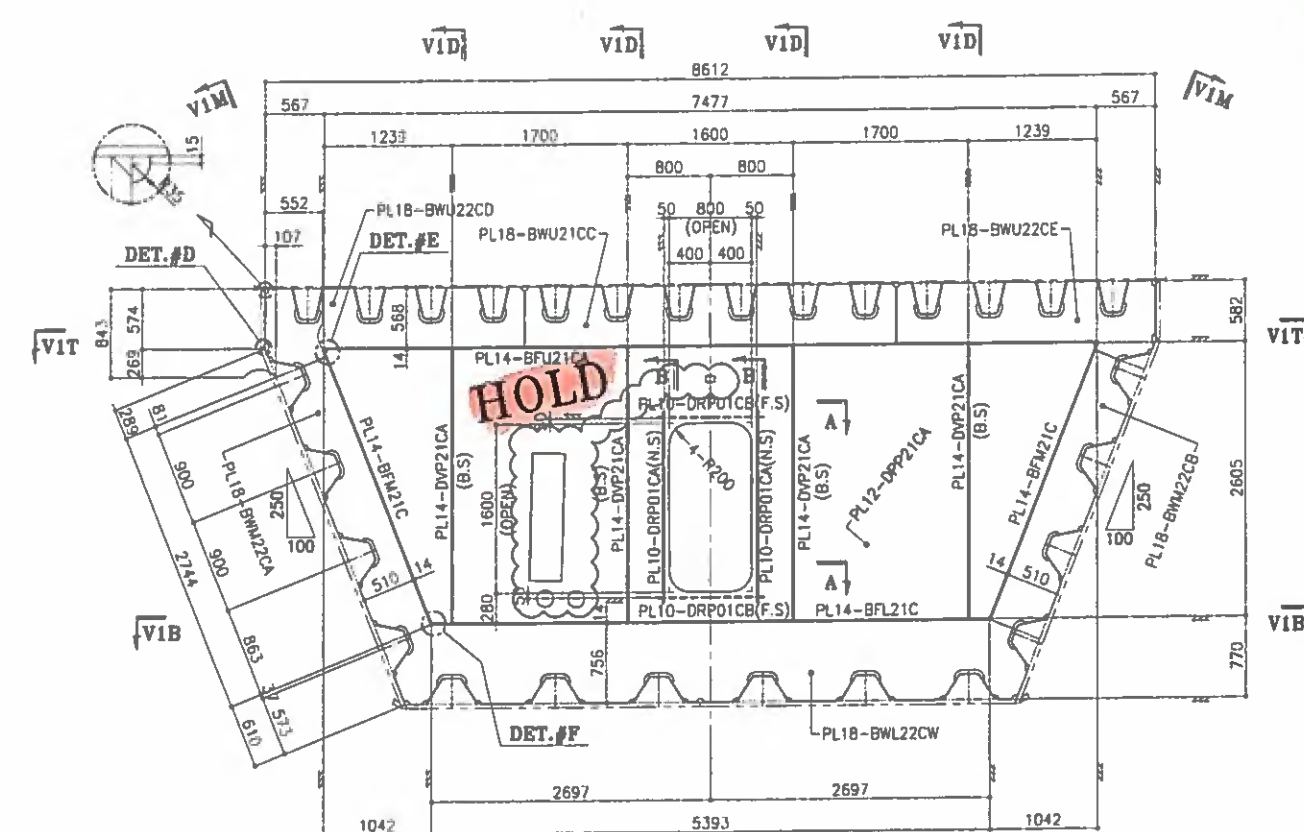


Provide Ref.
for weld size
and back plate
size.

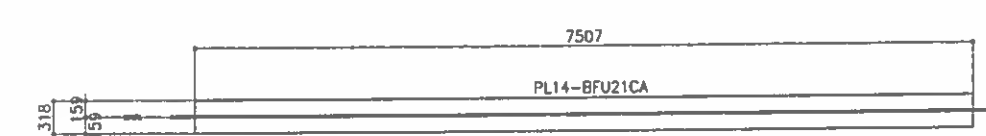


Provide approved Reference

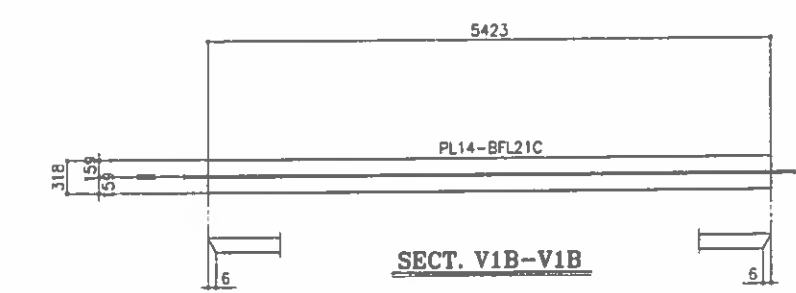
ON SCALE



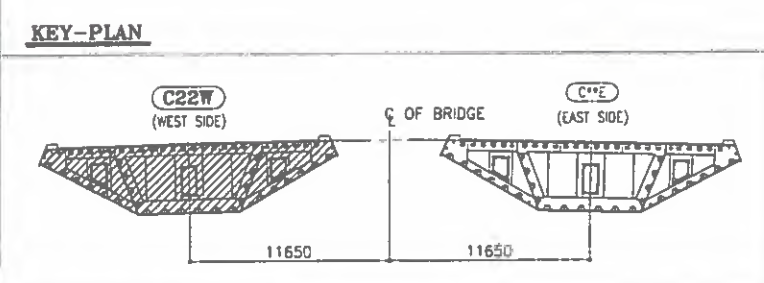
VIEW #1



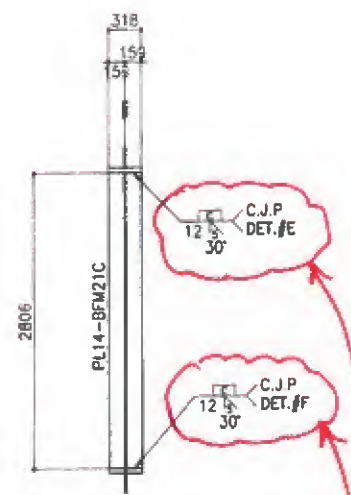
SECT. V1T-V1T



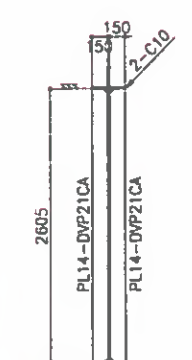
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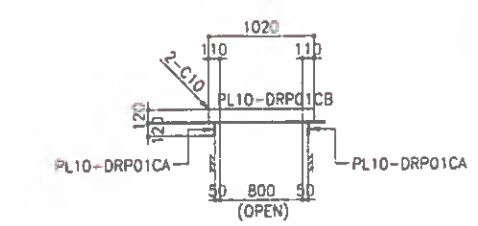
KEY-PLAN



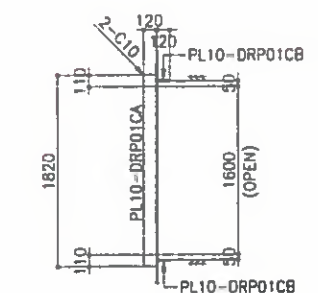
SECT. V1M



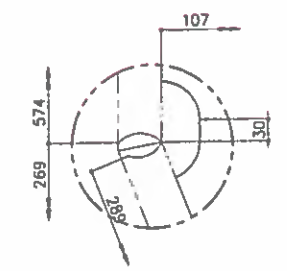
SECT. V1D



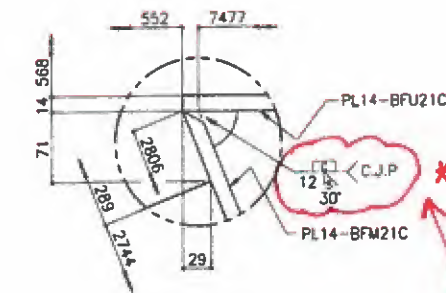
SECT. A



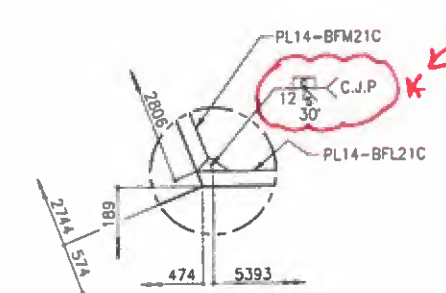
SECT. B



DET.#D



DET.#E



DET.#F

Provide approved reference

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R=35, C=15 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C22W" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

DRAWING NO.
RA140-22-BRG-SD-SEC-228

REV.
A

Provide approved Reference

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C22E	<DIAPHRAGM>	ONE				
BWU21CA	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CB	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CC	PL 18*568	3600	1	289	A709M Gr.345	
BWU22CD	PL 18*843	2506	1	299	A709M Gr.345	
BWU22CE	PL 18*843	2506	1	299	A709M Gr.345	
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345	
BFU21CB	PL 14*318	2854	2	199	A709M Gr.345	
BWU22CE	PL 18*756	6359	1	679	A709M Gr.345	
BFL21C	PL 14*318	5423	1	190	A709M Gr.345	
BWU22CA	PL 18*446	5038	1	317	A709M Gr.345	
BWU22CB	PL 18*446	5038	1	317	A709M Gr.345	
BFL21C	PL 14*318	4501	2	315	A709M Gr.345	
BWU21CA	PL 18*1422	1556	1	313	A709M Gr.345	
BWU21CB	PL 18*1422	1556	1	313	A709M Gr.345	
BFE01D	PL 14*318	517	2	36	A709M Gr.345	
BWU22CA	PL 18*510	2744	1	198	A709M Gr.345	
BWU22CB	PL 18*510	2744	1	198	A709M Gr.345	
BFL21C	PL 14*318	2806	2	196	A709M Gr.345	
OPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345	
DVP21CA	PL 14*150	2605	8	344	A709M Gr.345	
DRP01CB	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DPP21CB	PL 12*2682	3913	2	1977	A709M Gr.345	
DVP21CB	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CC	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CD	PL 14*150	1955	2	64	A709M Gr.345	
DVP21CE	PL 14*150	1955	2	64	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP21CA	PL 10*120	1155	2	22	A709M Gr.345	
DRP21CB	PL 10*120	980	2	18	A709M Gr.345	
DRP21CC	PL 10*120	1481	2	28	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				9387		

Refer To Comments on
Dnw. SD-SEC-227-A

SECTION C22E

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV. DATE DESCRIPTION OF REVISION DRAWN CHECK APPRO.

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C22E" (1)

SCALE 1 : 35
DATE ISSUED 2016.02.25
CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO. RA140-22-BRG-SD-SEC-230

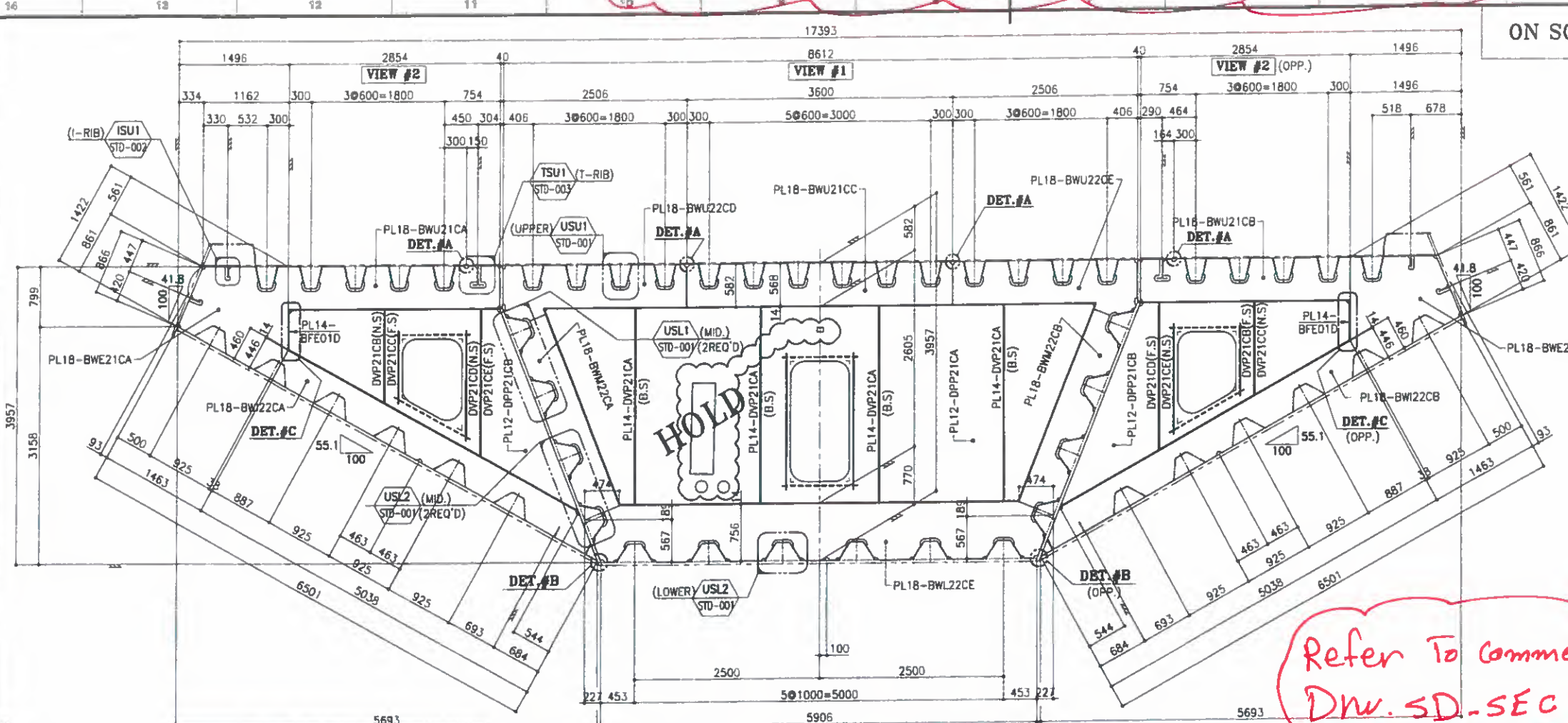
NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R=35, C=15 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

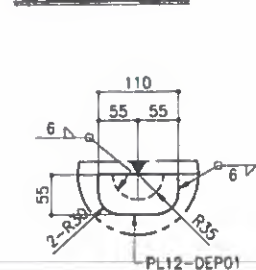
REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

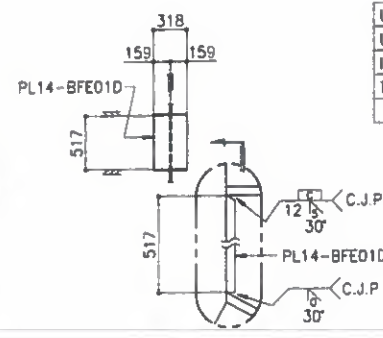
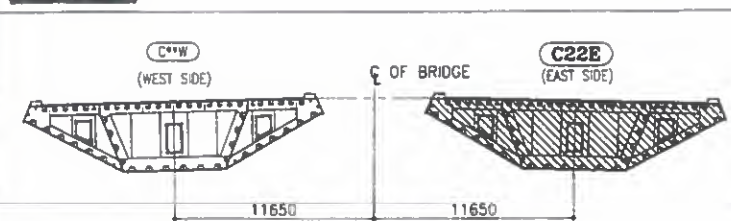
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



WELDING MAP

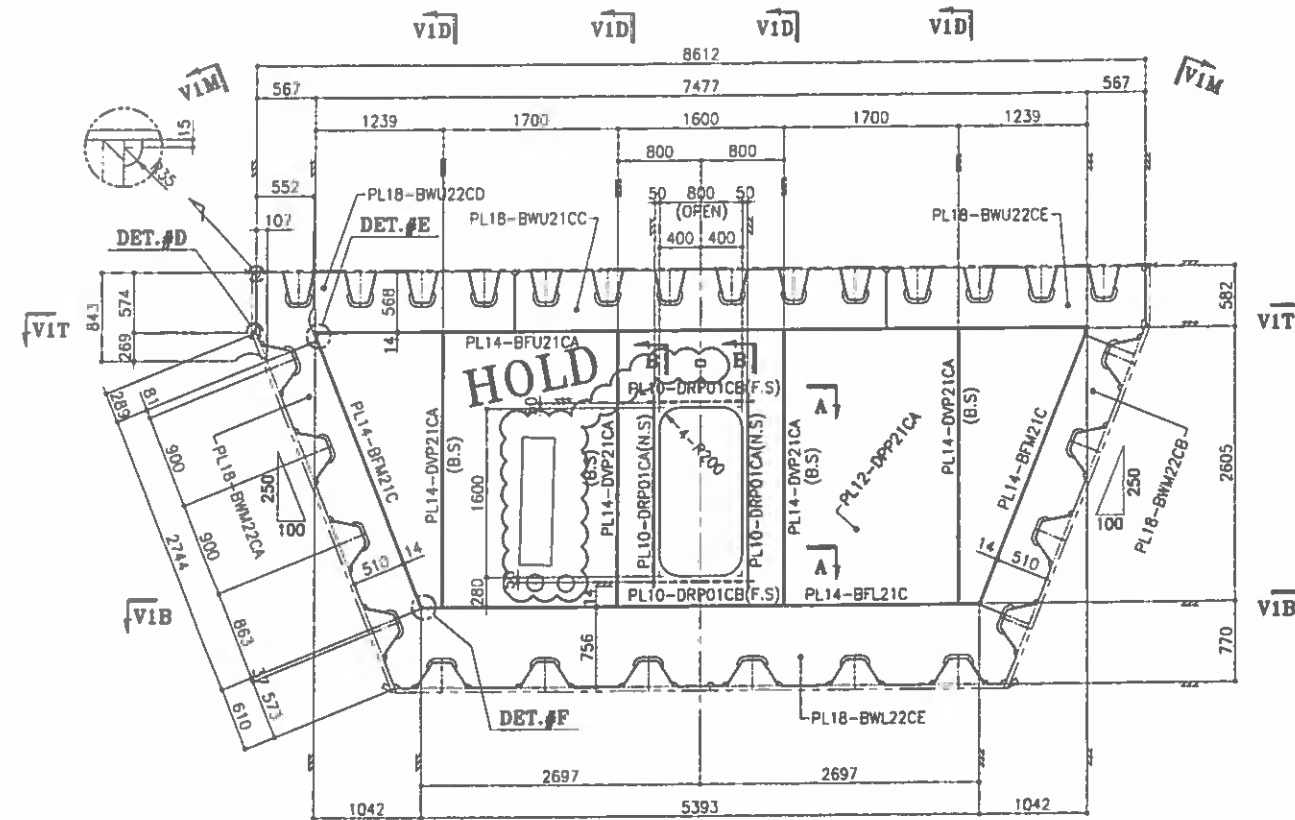


KEY-PLAN



Provide approved Reference

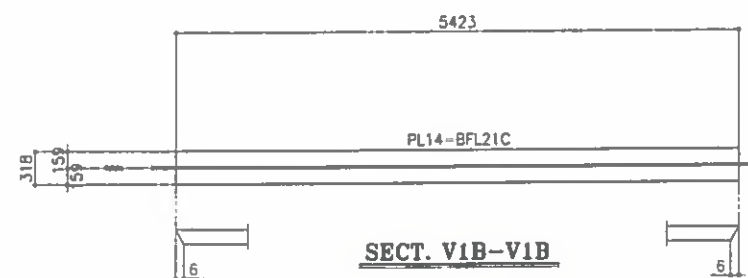
ON SCALE



VIEW #1

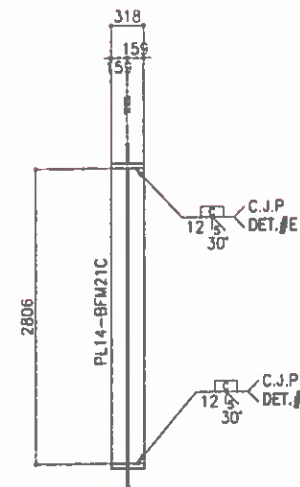
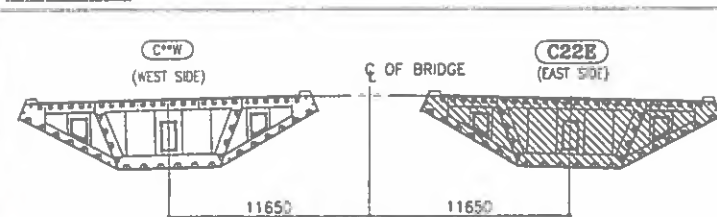


SECT. V1T-V1T



SECT. V1B-V1B

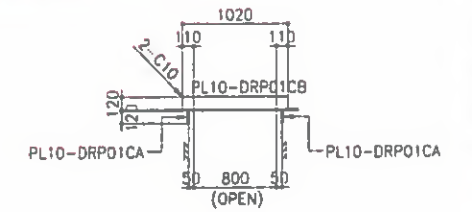
KEY-PLAN



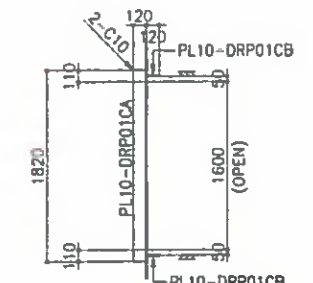
SECT. V1M



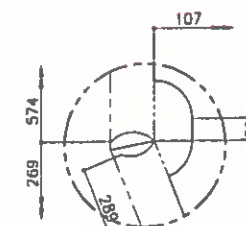
SECT. V1D



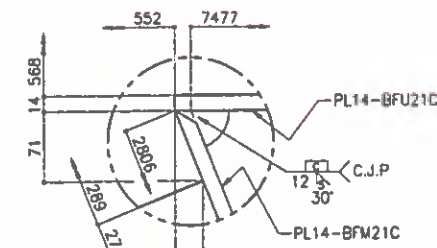
SECT. A



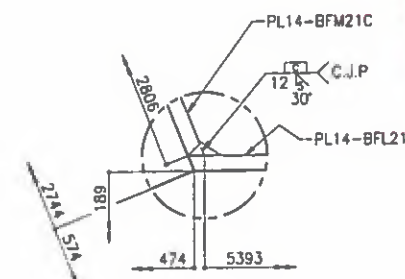
SECT. B



DET.#D



DET.#E



DET.#F

Refer To Comments on
Dnw. SD-SEC-228-A

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

NOTES

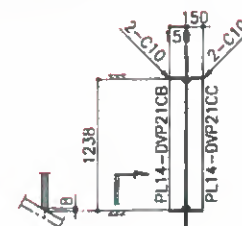
1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R=25, C=15 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

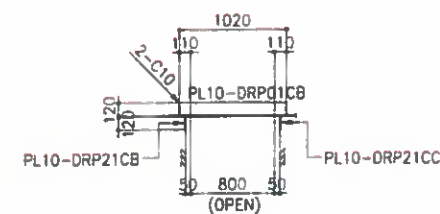
HYUNDAI E&S CONSTRUCTION GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK SECTION DETAIL "C22E" (2)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
1 : 35	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S CONSTRUCTION GROUP					
DRAWING NO.					
RA140-22-BRG-SD-SEC-231					
REV.					
A					

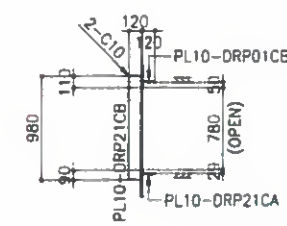
ON SCALE



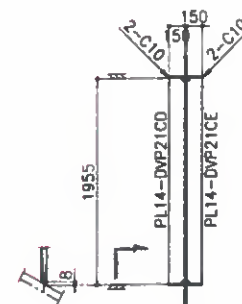
SECT. V2S



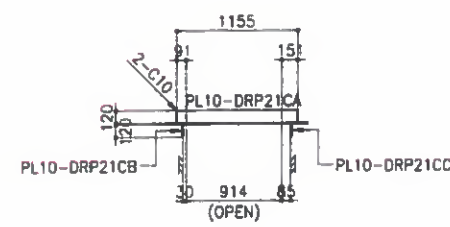
SECT. C



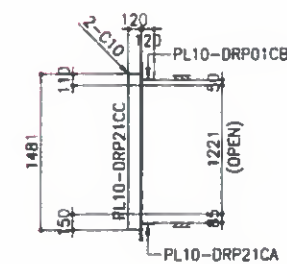
SECT. E



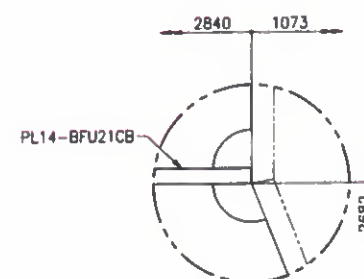
SECT. V2E



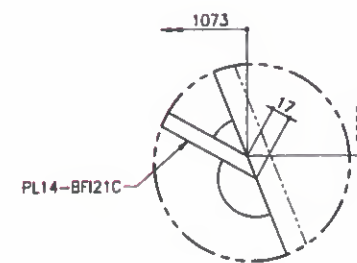
SECT. D



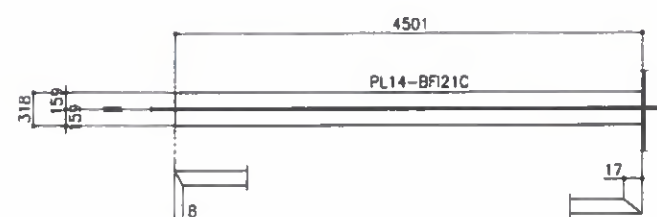
SECT. F



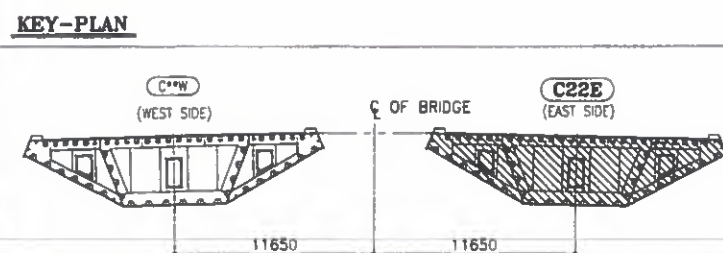
DET.#G



DET.#H



SECT. V2I-V2I



KEY-PLAN

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE D.O.W., UNLESS NOTED
2. SCALLOP R= 25, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*

A	2018.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S. MOON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROVED

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SECTION DETAIL "C22E" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



HYUNDAI
ENGINEERING & CONSTRUCTION


Combined Group
 Contracting Company

DRAWING NO.

RA140-22-BRG-SD-SEC-232

REV

A



DET.#B

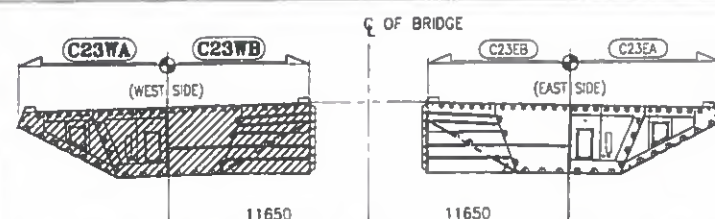


DET.#P



"PL12-DHP23CF~H" DETAIL
"PL12-DHF23CF~H" DETAIL

KEY-PLAN



- ## NOTES

1. MATERIALS SEE D.O.W. UNLESS NOTED
2. SCALLOP R= 35, D= 15 00 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

MARK	REF. DWG. NO.
USU1	SD-STO-001
USL1	SD-STO-001
ISU1, ISU2	SD-STO-002
TSU1	SD-STO-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

A	2018.02.25	FOR APPROVAL	HJ.PARK	S.S.SCHW	S.AJO				
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APP.				
EMPLOYER									

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SECTION DETAIL "C23WA / B" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

2016.04.13
CONTRACTOR



HYUNDA
ENGINEERING & CONSTRUCTION


Combined Group
Contracting Company

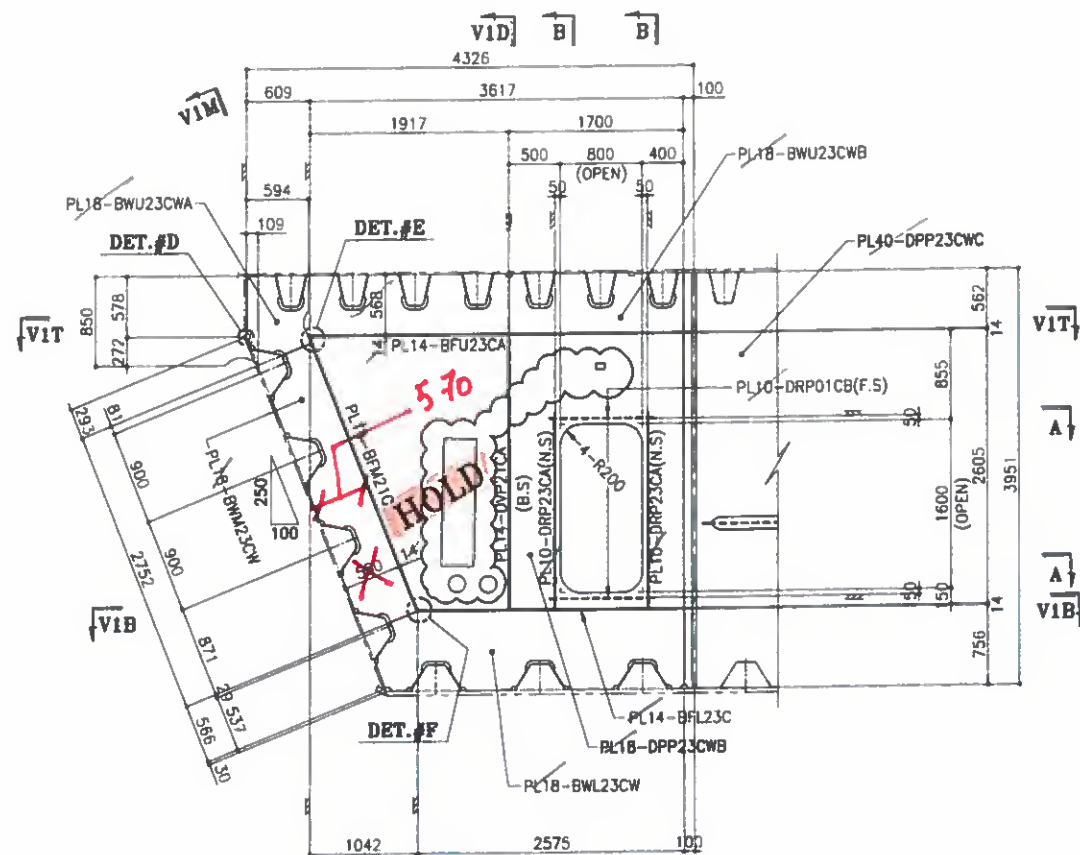
DRAWING NO.

RA140-22-BRG-SD-SEC-234

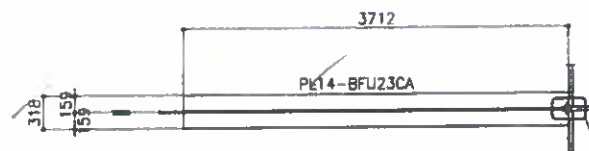
	R
--	---

1

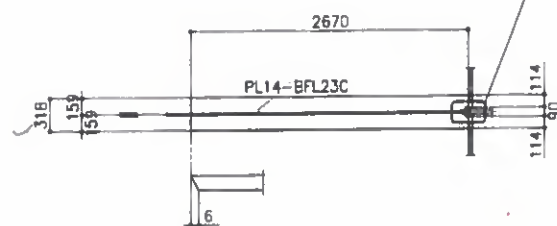
ON SCALE



VIEW #1

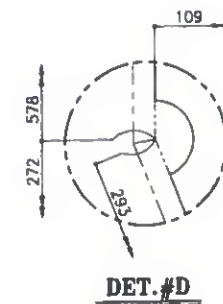
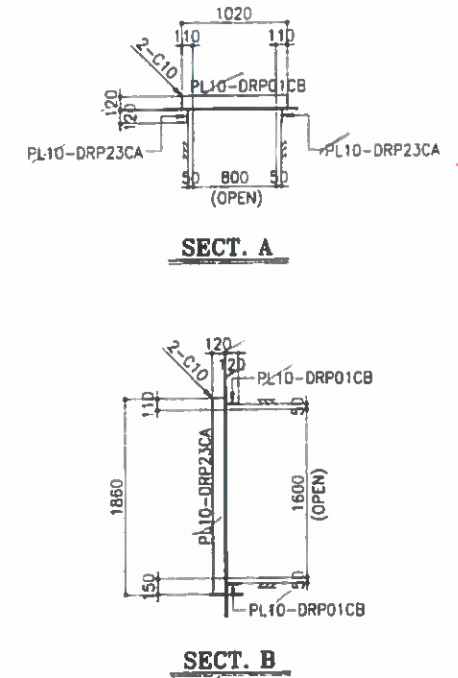
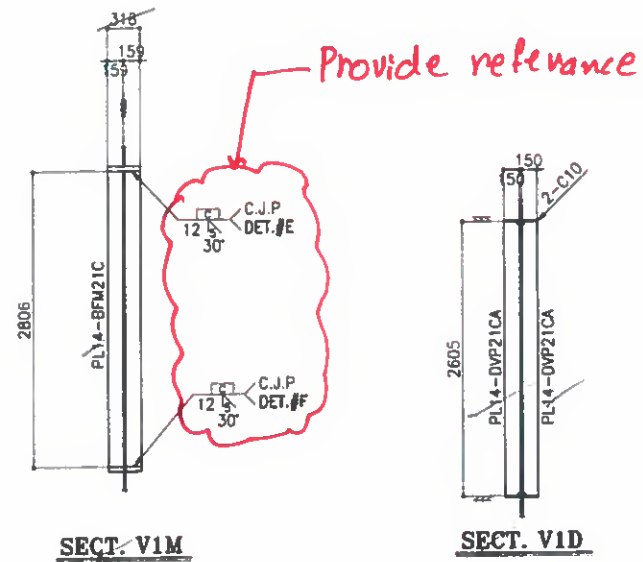
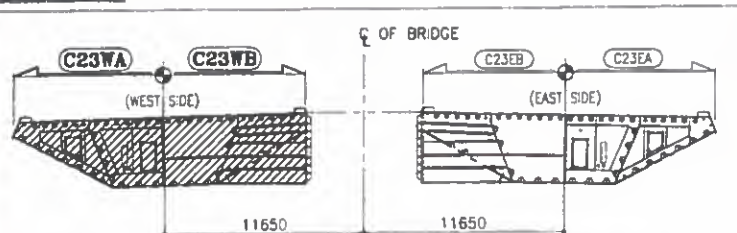


SECT. V1T-V1T

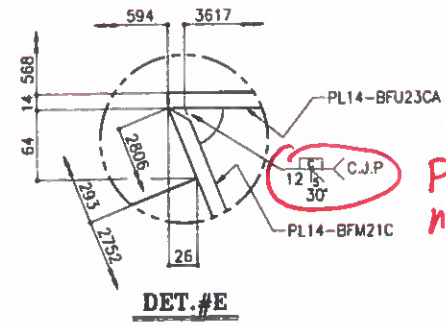


SECT. V1B-V1B

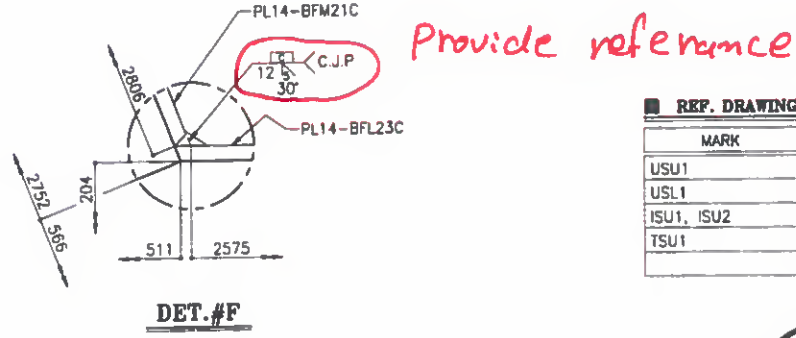
KEY-PLAN



DET.#D



DET.#E



DET.#F

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=15 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROD.
------	------	-------------------------	-------	-------	---------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

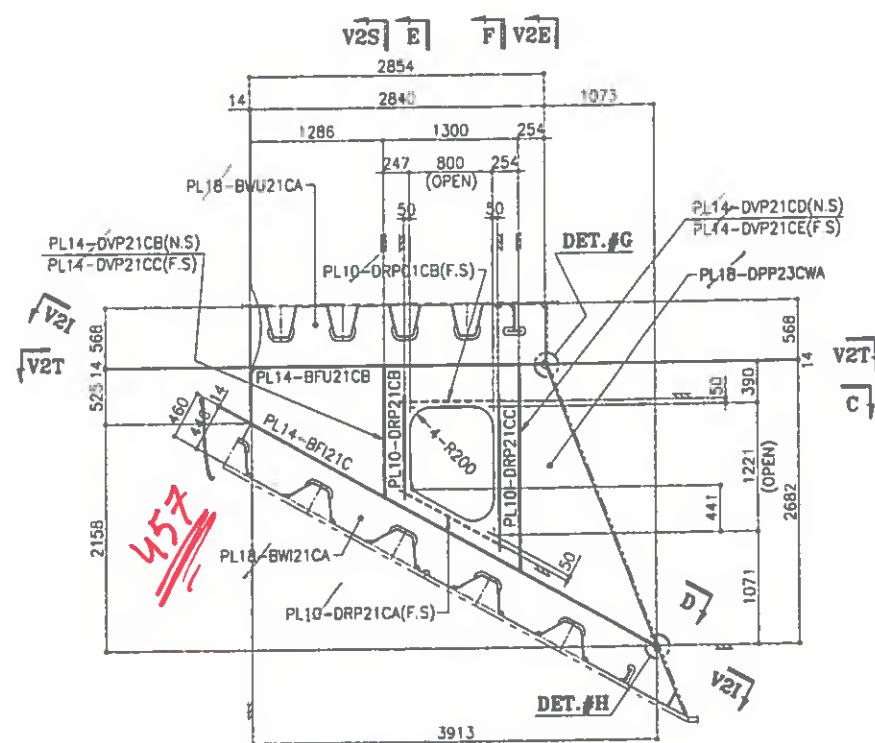
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C23WA / B" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

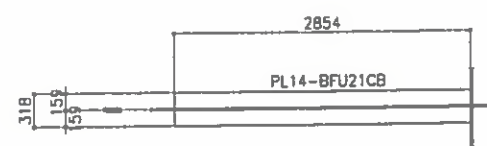
CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-235

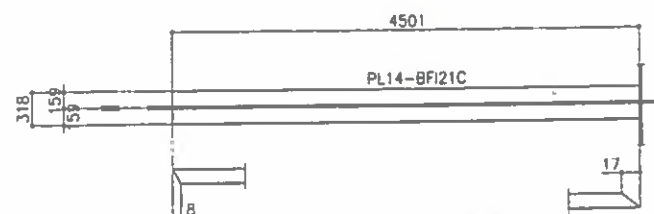
ON SCALE



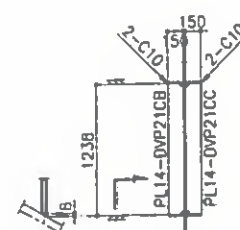
VIEW #2



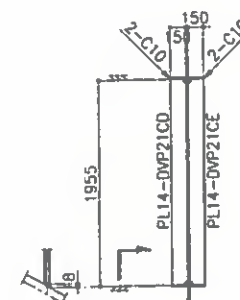
SECT. V2T-V2T



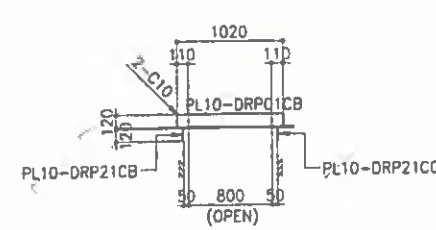
SECT. V2I-V2I



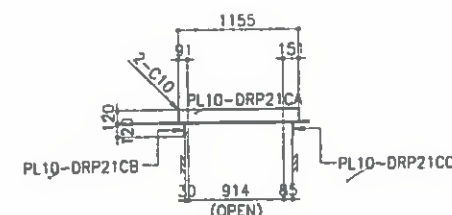
SECT. V2S



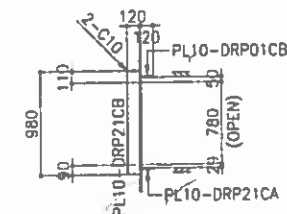
SECT. V2E



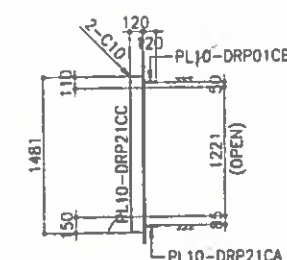
SECT. C



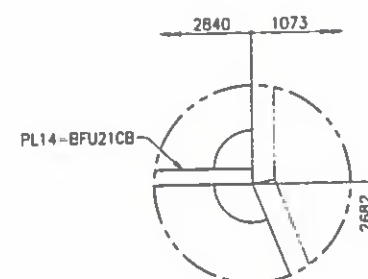
SECT. D



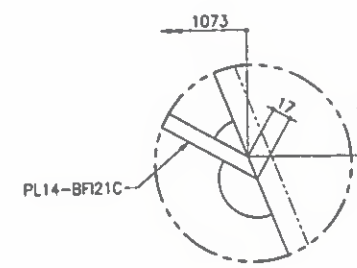
SECT. E



SECT. F



DET.#G



DET.#H

FOR CONSTRUCTION
Date : 27/02/15 Signature : M.J. LEE *M.J. Lee*

A	2018.02.25	FOR APPROVAL	HLPARKAP	S.S.SOHOF	S.BHIGON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO

EMPLOYER _____

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C23WA / B" (4**

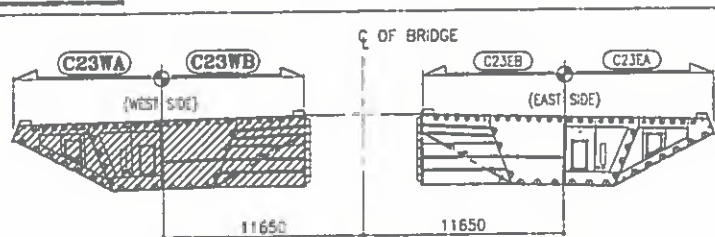
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-236	A

KEY-PLAN



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP $R = .36$, $C = .15$ UNLESS NOTED
3. ALL FILLET WELD:  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

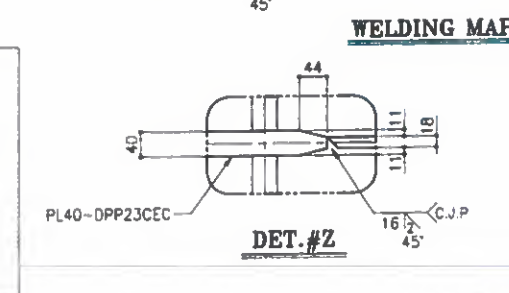
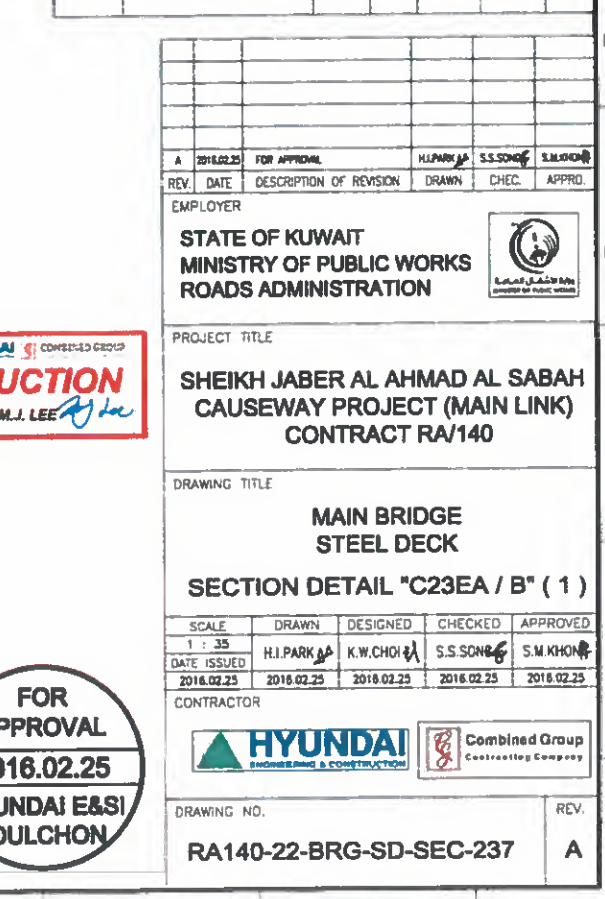
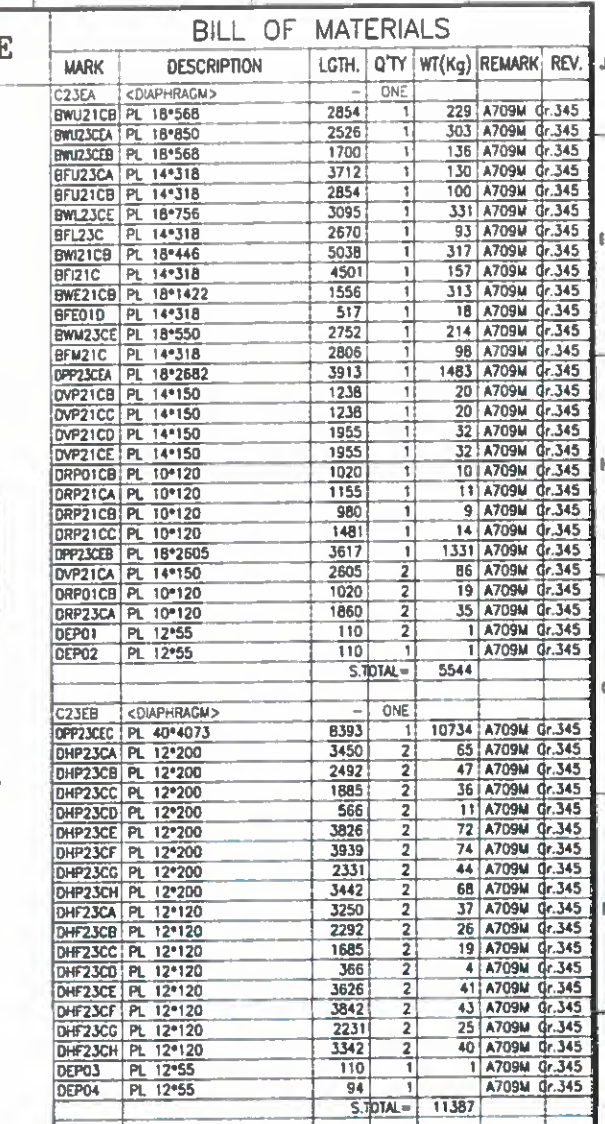
FOR
APPROVAL
2016.02.25
HYUNDAI E&
YOULCHON



HYUNDAI
 ENGINEERING & DESIGN • IT'S OUR PASSION

DRAWING NO. RA140-22-BRG-SD-SEC-236

ON SCALE



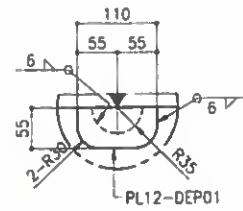
NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= .35 , C= .16 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

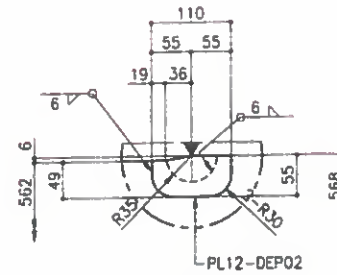
REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

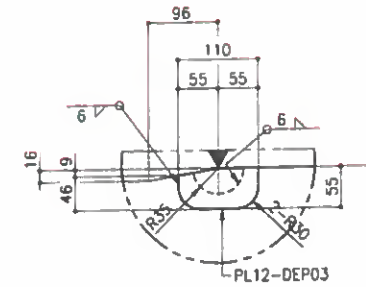
(Refer To comments on Draw. SD-ŠEC-234-A)



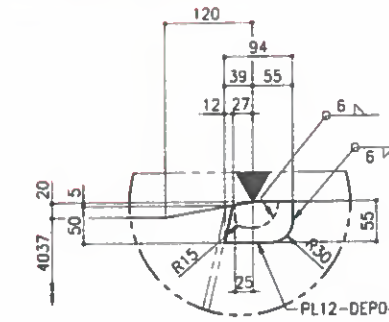
DET.#A



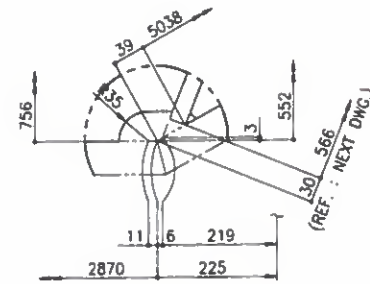
DET.#J



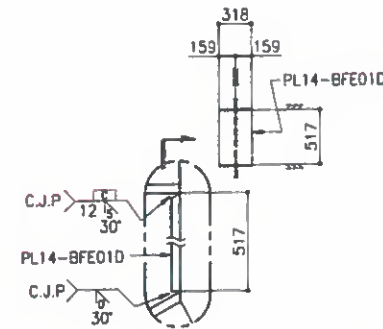
DET.#K



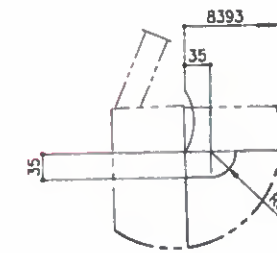
DET.#M



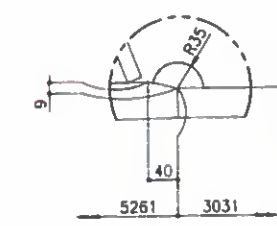
DET.#B



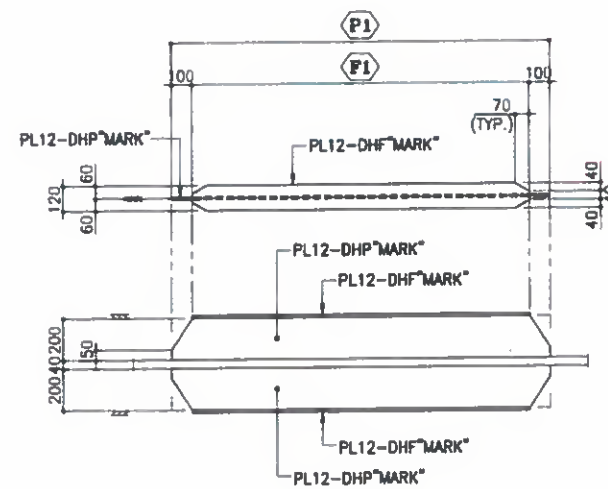
DET.#C



DET.#P

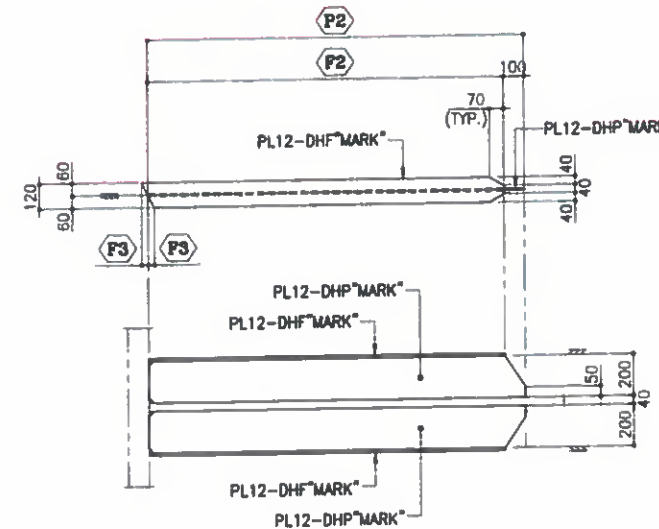


DET.#9



"PL12-DHP23CA~E" DETAIL
"PL12-DHF23CA~E" DETAIL

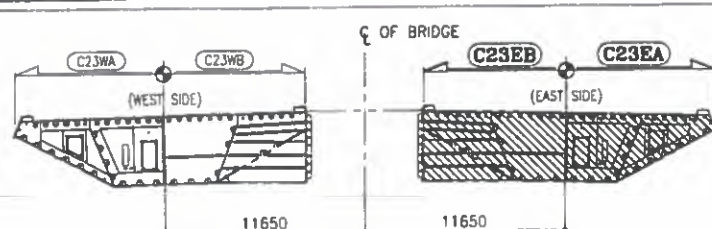
MARK		P1	P1
DHF MARK	DHF23CA	3450	-
	DHF23CB	2492	-
	DHF23CC	1885	-
	DHF23CD	566	-
	DHF23CE	3826	-
DHF MARK	DHF23CA	-	3250
	DHF23CB	-	2292
	DHF23CC	-	1685
	DHF23CD	-	366
	DHF23CE	-	3626



"PL12-DHP23CF~H" DETAIL
"PL12-DHF23CF~H" DETAIL

MARK		P2	F2	F3
DHP MARK	DHP23CF	3939	-	-
	DHP23CG	2331	-	-
	DHP23CH	3442	-	-

DHP MARK	DHF23CF	-	3839	3
	DHF23CG	-	2231	0
	DHF23CH	-	3342	0



NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

MARK	REF. DWG. NO.
USU1	SD-STO-001
USL1	SD-STO-001
ISU1, ISU2	SD-STO-002
TSU1	SD-STO-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *M.J. Lee*

A	2018.02.23	FOR APPROVAL	HJ PARK	S.S. SONG	S.M. KIM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
EMPLOYER					

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C23EA / B" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

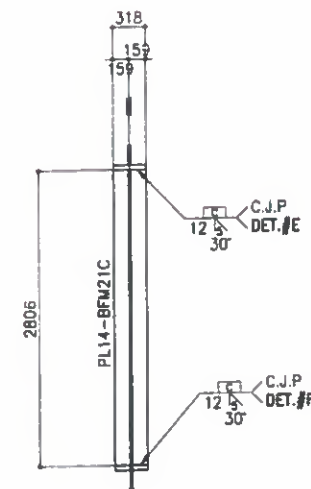
CONTRACTOR

 **HYUNDAI**
ENGINEERING & CONSTRUCTION

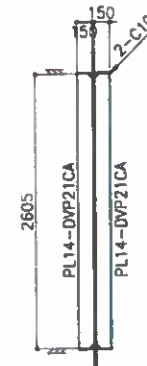
 **Combined Group**
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-238	A

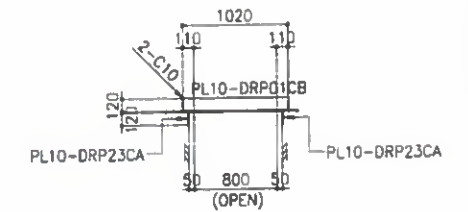
ON SCALE



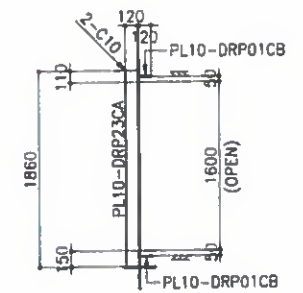
SECT. V1M



SECT. V1D

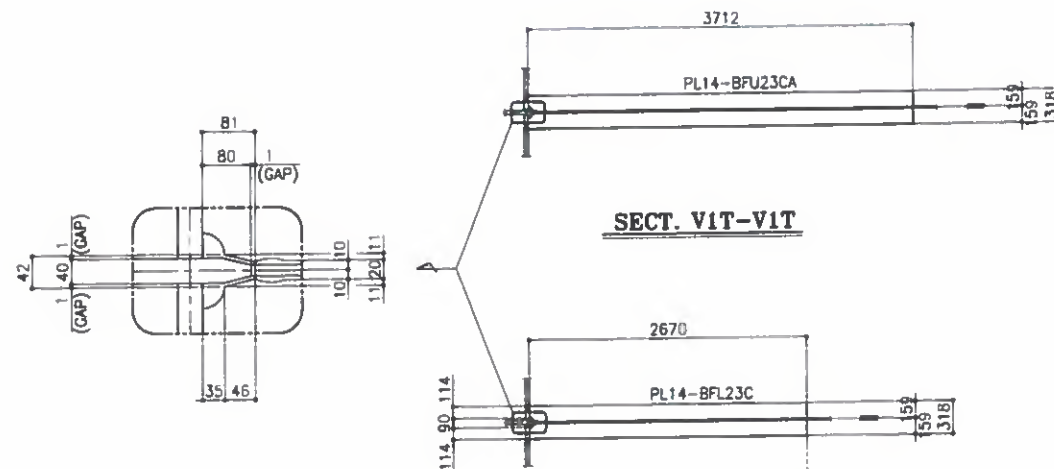


SECT. A

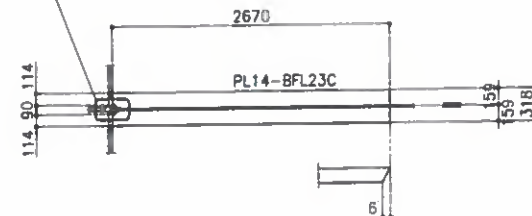


SECT. B

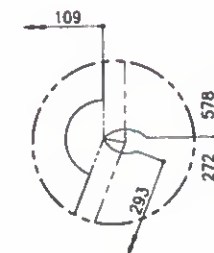
VIEW #1



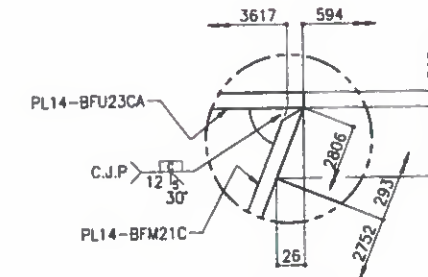
SECT. V1T-V1T



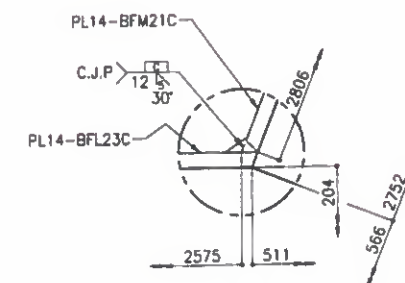
SECT. V1B-V1B



DET.#D

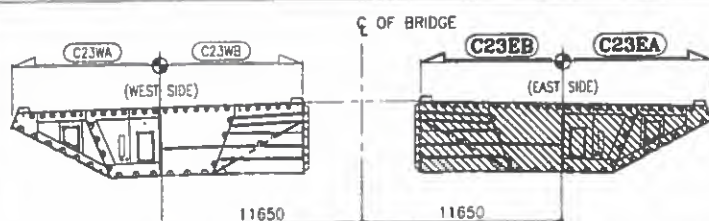


DET.#E



DET.#F

KEY-PLAN



REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 36 , C= 15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *[Signature]*

A	2018.02.25	FOR APPROVAL	H. PANIKAR	S. S. SONDE	S. M. KHORRAM
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE STEEL DECK

SECTION DETAIL "C23EA / B" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



HYUNDAI
ENGINEERING & CONSTRUCTION



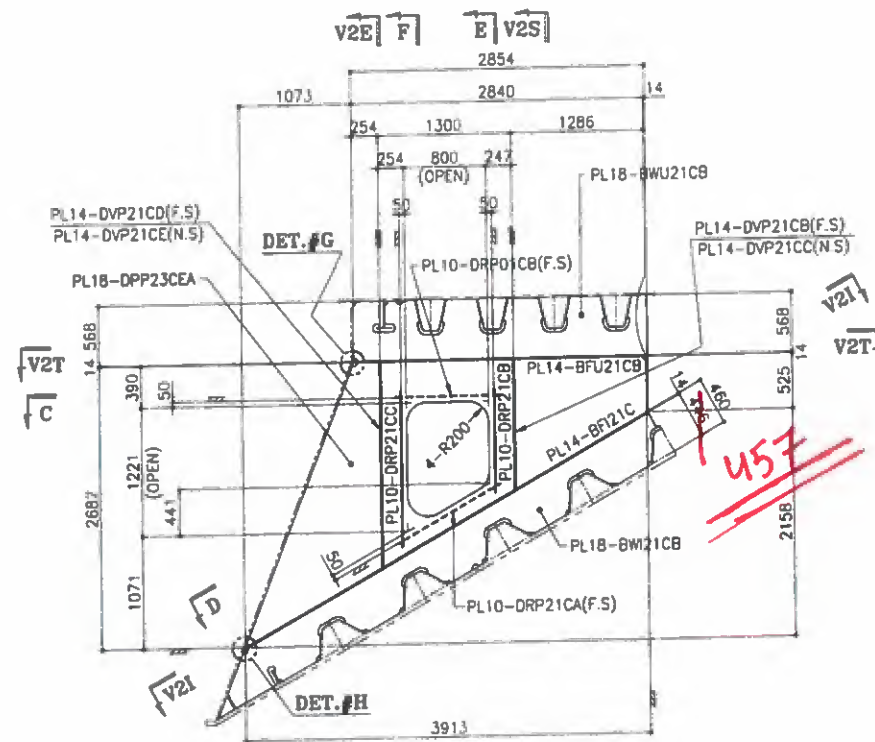
Combined Group
Controlling Company

DRAWING NO.

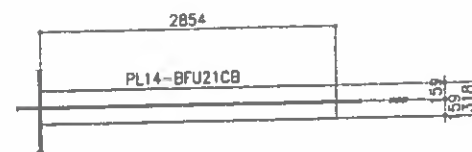
RA140-22-BRG-SD-SEC-239

REV.

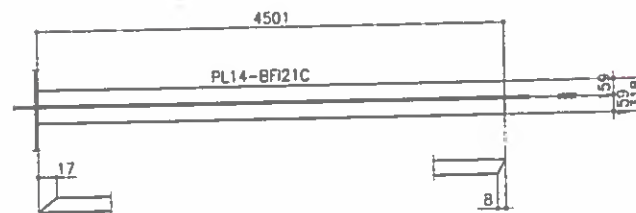
ON SCALE



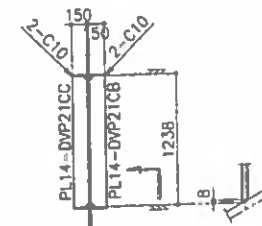
VIEW #2



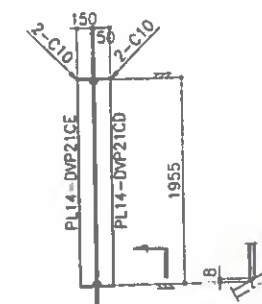
SECT. V2T-V2T



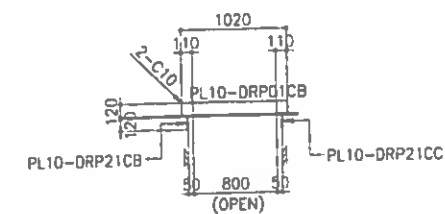
SECT. V2I-V2I



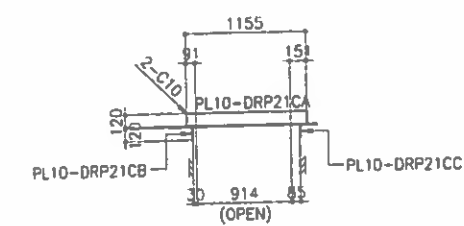
SECT. V2S



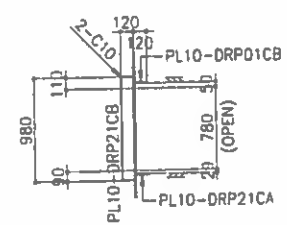
SECT. V2E



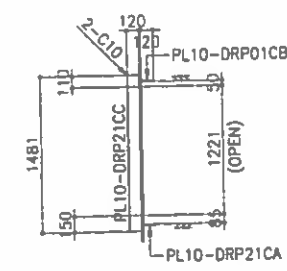
SECT. C



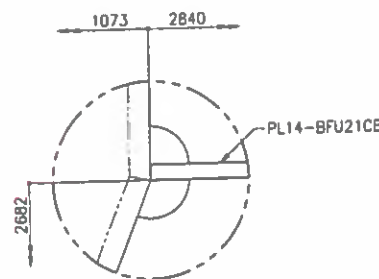
SECT. D



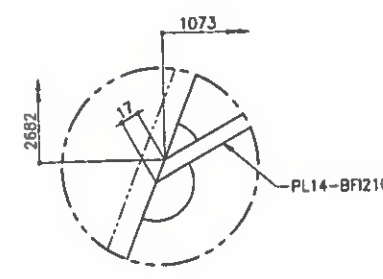
SECT. E



SECT. F

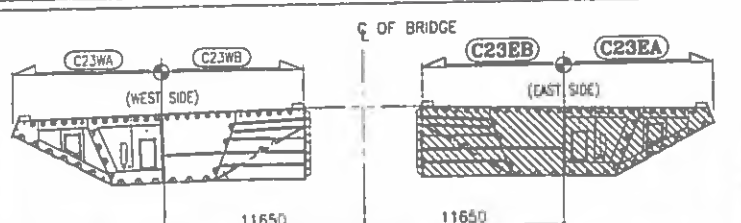


DET.#G



DET.#H

KEY-PLAN



REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. GALVALAP $\approx$ 35, ϕ 15 UNLESS NOTED
3. ALL FILLET WELD: ϕ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

A 2016.02.25 FOR APPROVAL		H.J. PARK		S.S. SON		S.M. KHON	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.		
EMPLOYER							
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION							
PROJECT TITLE							
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140							
DRAWING TITLE							
MAIN BRIDGE STEEL DECK SECTION DETAIL "C23EA / B" (4)							
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED			
1 : 35	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON			
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25			
CONTRACTOR							
HYUNDAI E&S YOULCHON							
DRAWING NO.							
RA140-22-BRG-SD-SEC-240							
REV.							
A							

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C24W	<DAPHRAGM>	—	ONE			
DPP24CWA	PL 40*3951	2885	1	3579	A709M Gr.345	
DPP24CWB	PL 60*4073	5388	1	10336	A709M Gr.345	
DHP23CB	PL 12*200	2492	2	94	A709M Gr.345	
DHP23CC	PL 12*200	1885	2	71	A709M Gr.345	
DHP23CD	PL 12*200	566	2	21	A709M Gr.345	
DHP23CE	PL 12*200	3826	2	144	A709M Gr.345	
DHP23CF	PL 12*200	3939	2	148	A709M Gr.345	
DHP23CG	PL 12*200	2331	2	88	A709M Gr.345	
DHP23CH	PL 12*200	3442	2	136	A709M Gr.345	
DHP24CA	PL 12*200	3438	2	130	A709M Gr.345	
DHF23CB	PL 12*120	2292	2	52	A709M Gr.345	
DHF23CC	PL 12*120	1685	2	38	A709M Gr.345	
DHF23CD	PL 12*120	366	2	8	A709M Gr.345	
DHF23CE	PL 12*120	3626	2	82	A709M Gr.345	
DHF23CF	PL 12*120	3842	2	87	A709M Gr.345	
DHF23CG	PL 12*120	2231	2	50	A709M Gr.345	
DHF23CH	PL 12*120	3342	2	79	A709M Gr.345	
DHP24CA	PL 12*120	3238	2	73	A709M Gr.345	
DEP03	PL 12*55	110	1	1	A709M Gr.345	
DEP04	PL 12*55	94	1	1	A709M Gr.345	

S.TOTAL= 15219

SECTION C24W

check with design drawing

DET.#K

DET.#M

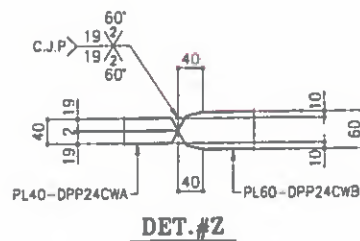
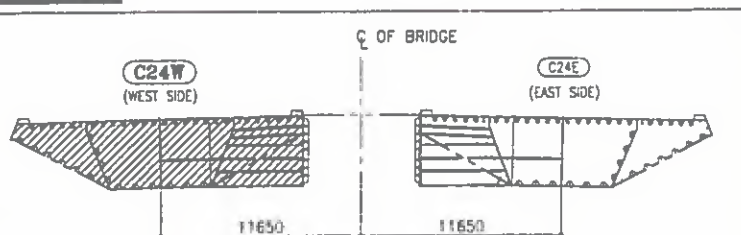
provide reference

DET.#P

WELDING MAP

* (provide approved reference.)

KEY-PLAN



NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R=35, C=15 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

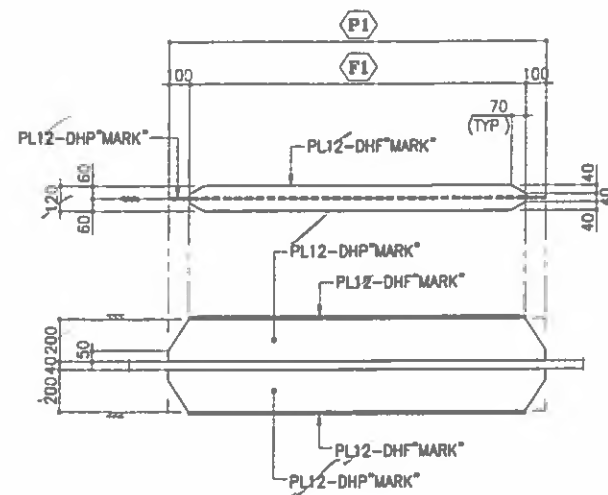
DRAWING TITLE
MAIN BRIDGE STEEL DECK
SECTION DETAIL "C24W" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:35	H.I.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

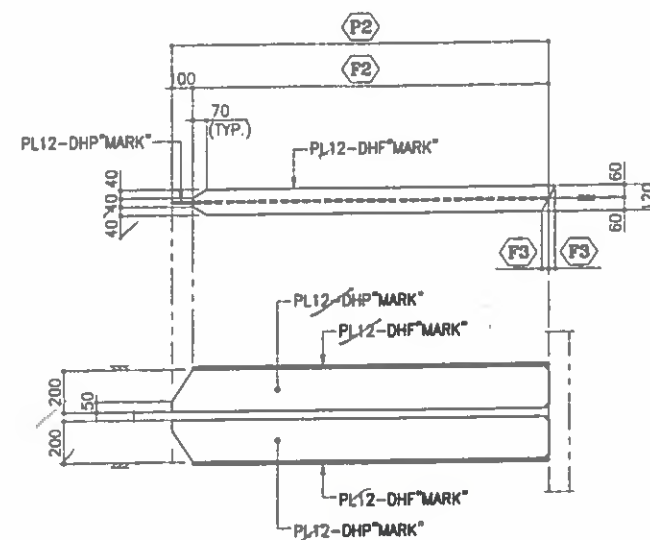
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-241
REV. A



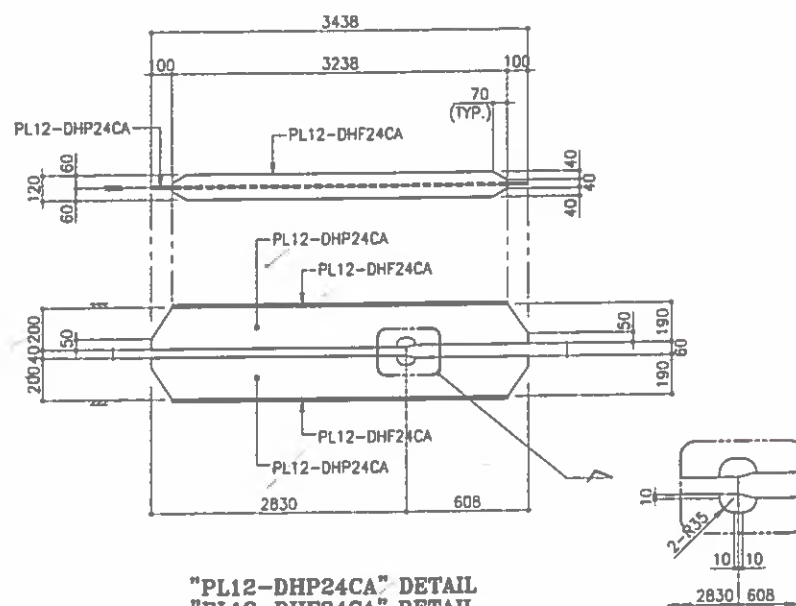
"PL12-DHP23CB~E" DETAIL
"PL12-DHF23CB~E" DETAIL

MARK	F1	F1
DHP23CB	2492	-
DHP23CC	1885	-
DHP23CD	566	-
DHP23CE	3826	-
DHF23CB	-	2292
DHF23CC	-	1685
DHF23CD	-	366
DHF23CE	-	3626



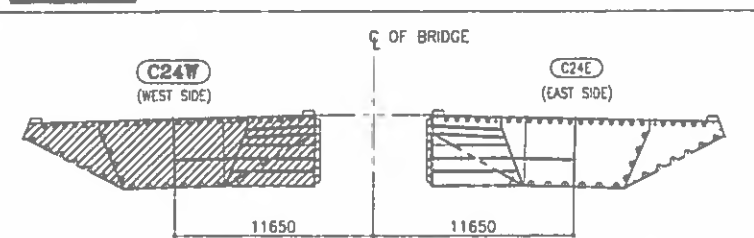
"PL12-DHP23CF~H" DETAIL
"PL12-DHF23CF~H" DETAIL

MARK	F2	F2	F3
DHP23CF	3939	-	-
DHP23CG	2331	-	-
DHP23CH	3442	-	-
DHF23CF	-	3839	3
DHF23CG	-	2231	0
DHF23CH	-	3342	0



"PL12-DHP24CA" DETAIL
"PL12-DHF24CA" DETAIL

KEY-PLAN



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, > 15 UNLESS NOTED
3. ALL FILLET WELD: 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROD.
-----	------	-------------------------	-------	-------	---------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C24W" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI CONSTRUCTION GROUP
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-242

Refer To comments on
Drw. # SD-SEC-241-A

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
C24E	<DIAPHRAGM>		ONE			
DPP24CEA	PL 40*3951	2885	1	3579	A709M Gr.345	
DPP24CEB	PL 60*4073	5388	1	10336	A709M Gr.345	
DHP23CB	PL 12*200	2492	2	94	A709M Gr.345	
DHP23CC	PL 12*200	1885	2	71	A709M Gr.345	
DHP23CD	PL 12*200	566	2	21	A709M Gr.345	
DHP23CE	PL 12*200	3826	2	144	A709M Gr.345	
DHP23CF	PL 12*200	3939	2	148	A709M Gr.345	
DHP23CG	PL 12*200	2331	2	88	A709M Gr.345	
DHP23CH	PL 12*200	3442	2	136	A709M Gr.345	
DHP24CA	PL 12*200	3438	2	130	A709M Gr.345	
DHF23CB	PL 12*120	2292	2	52	A709M Gr.345	
DHF23CC	PL 12*120	1685	2	38	A709M Gr.345	
DHF23CD	PL 12*120	366	2	8	A709M Gr.345	
DHF23CE	PL 12*120	3626	2	82	A709M Gr.345	
DHF23CF	PL 12*120	3842	2	87	A709M Gr.345	
DHF23CG	PL 12*120	2231	2	50	A709M Gr.345	
DHF23CH	PL 12*120	3342	2	79	A709M Gr.345	
DHF24CA	PL 12*120	3238	2	73	A709M Gr.345	
DEP03	PL 12*55	110	1	1	A709M Gr.345	
DEP04	PL 12*55	94	1	1	A709M Gr.345	

S.TOTAL = 15219

SECTION C24E

DET.#M

DET.#K

DET.#Q

WELDING MAP

DET.#Z

NOTES

1. MATERIALS SEE D.O.B. UNLESS NOTED
2. SCALLOP R= 35, > 16 = UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

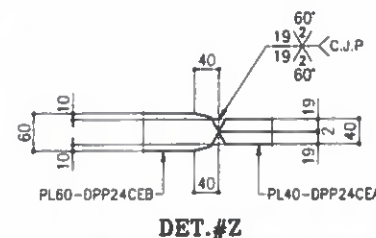
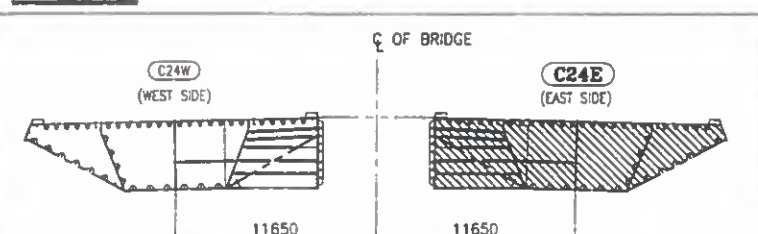
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C24E" (1)

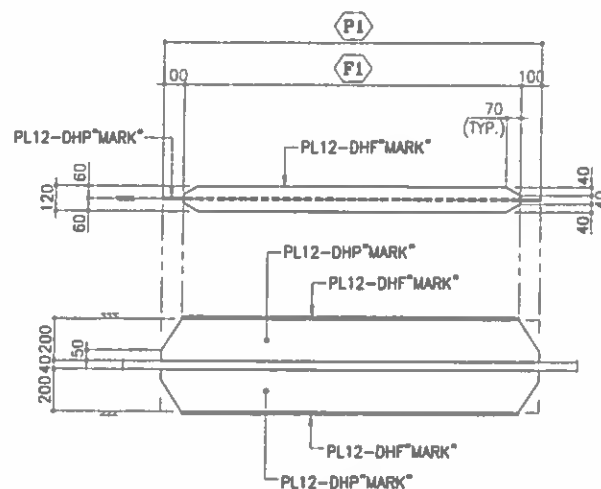
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-243
REV.
A

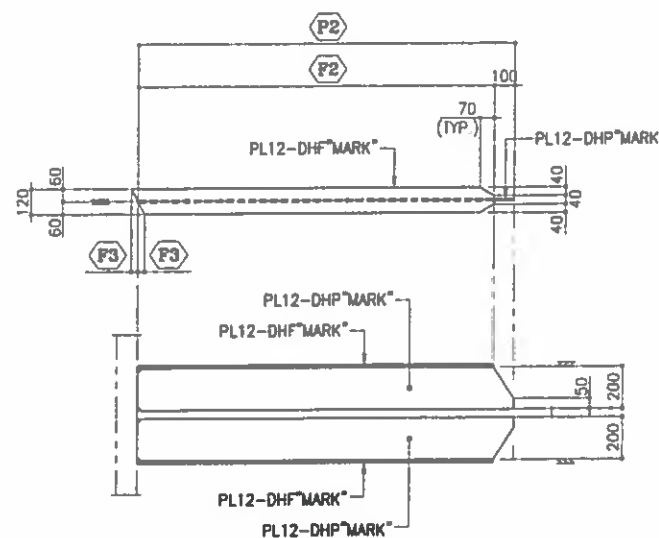
KEY-PLAN





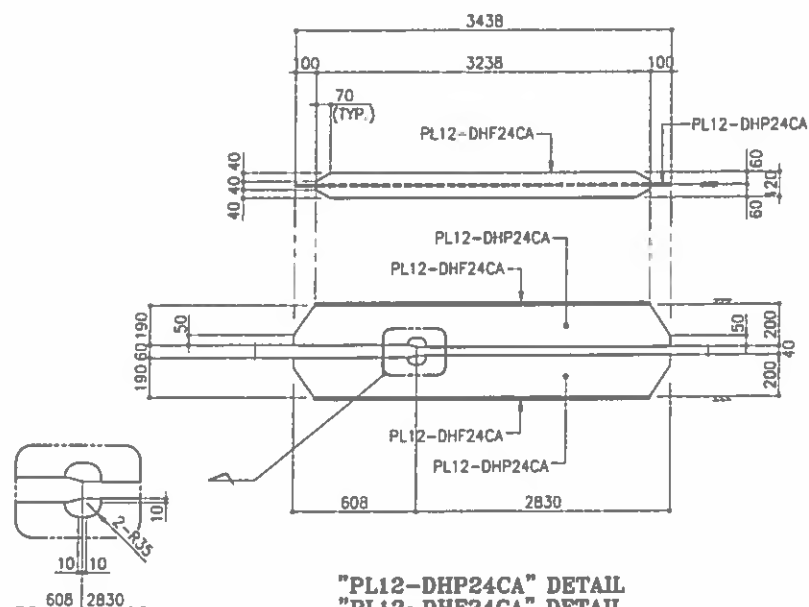
"PL12-DHP23CB~E" DETAIL
"PL12-DHF23CB~E" DETAIL

MARK	P1	F1
DHP23CB	2492	-
DHP23CC	1885	-
DHP23CD	566	-
DHP23CE	3826	-
DHF23CB	-	2292
DHF23CC	-	1685
DHF23CD	-	366
DHF23CE	-	3626



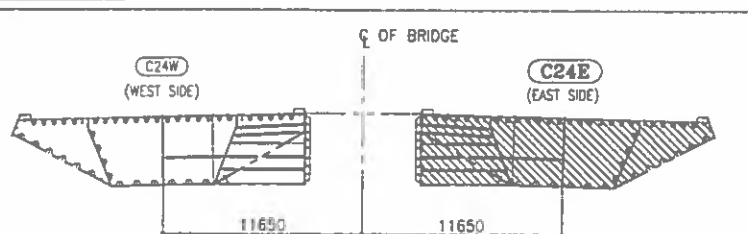
"PL12-DHP23CF~H" DETAIL
"PL12-DHF23CF~H" DETAIL

MARK	P2	F2	F3
DHP23CF	3939	-	-
DHP23CG	2331	-	-
DHP23CH	3442	-	-
DHF23CF	-	3839	3
DHF23CG	-	2231	0
DHF23CH	-	3342	0



"PL12-DHP24CA" DETAIL
"PL12-DHF24CA" DETAIL

KEY-PLAN



NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R=35, Ø=15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

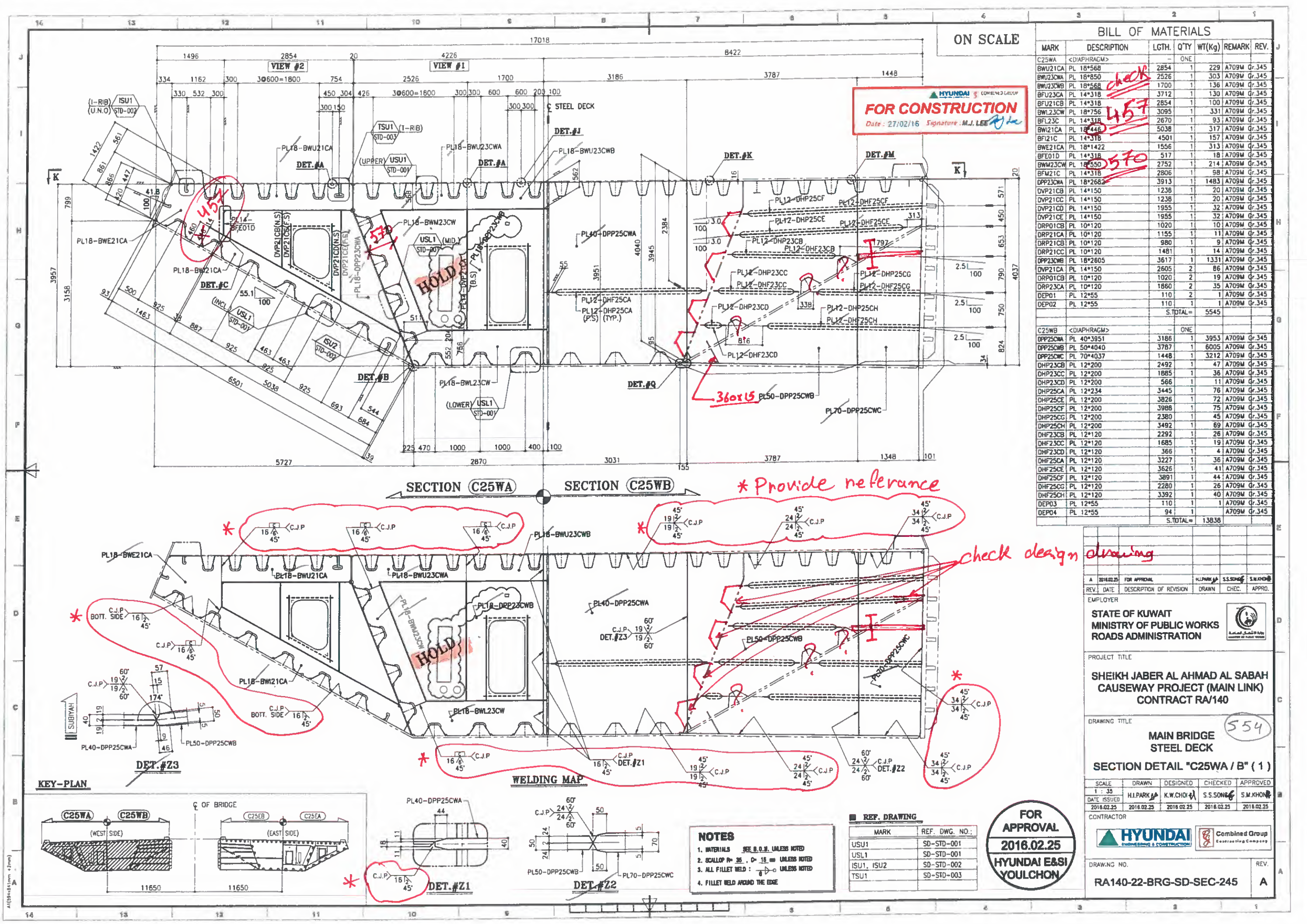
PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C24E" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHON	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI CONSTRUCTION GROUP
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-244
REV.
A



ON SCALE

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
C25WA	<DIAPHRAGM>	ONE				
BWU21CA	PL 18*568	2854	1	229	A709M Gr.345	
BWU23CWA	PL 18*850	2526	1	303	A709M Gr.345	
BWU23CWB	PL 18*568	1700	1	136	A709M Gr.345	
BFU23CA	PL 14*318	3712	1	130	A709M Gr.345	
BFU21CB	PL 14*318	2854	1	100	A709M Gr.345	
BWU23CW	PL 18*756	3095	1	331	A709M Gr.345	
BFL23C	PL 14*318	2670	1	93	A709M Gr.345	
BWU21CA	PL 18*446	5038	1	317	A709M Gr.345	
BFU21C	PL 14*318	4501	1	157	A709M Gr.345	
BWE21CA	PL 18*1422	1556	1	313	A709M Gr.345	
BFE01D	PL 14*318	517	1	18	A709M Gr.345	
BWM23CW	PL 18*550	2752	1	214	A709M Gr.345	
BFM21C	PL 14*318	2806	1	98	A709M Gr.345	
DPP23CWA	PL 18*2682	3913	1	1483	A709M Gr.345	
DVP21CB	PL 14*150	1238	1	20	A709M Gr.345	
DVP21CC	PL 14*150	1238	1	20	A709M Gr.345	
DVP21CD	PL 14*150	1955	1	32	A709M Gr.345	
DVP21CE	PL 14*150	1955	1	32	A709M Gr.345	
DRP01CB	PL 10*120	1020	1	10	A709M Gr.345	
DRP21CA	PL 10*120	1155	1	11	A709M Gr.345	
DRP21CB	PL 10*120	980	1	9	A709M Gr.345	
DRP21CC	PL 10*120	1481	1	14	A709M Gr.345	
DRP23CB	PL 18*2605	3617	1	1331	A709M Gr.345	
DVP21CA	PL 14*150	2605	2	86	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP23CA	PL 10*120	1860	2	35	A709M Gr.345	
DEP01	PL 12*55	110	2	1	A709M Gr.345	
DEP02	PL 12*55	110	1	1	A709M Gr.345	
	S.TOTAL			5545		
C25WB	<DIAPHRAGM>	ONE				
DPP25CWA	PL 40*3951	3186	1	3953	A709M Gr.345	
DPP25CWB	PL 50*4040	3787	1	6005	A709M Gr.345	
DPP25CWC	PL 70*4037	1448	1	3212	A709M Gr.345	
DHP23CB	PL 12*200	2492	1	47	A709M Gr.345	
DHP23CC	PL 12*200	1885	1	36	A709M Gr.345	
DHP23CD	PL 12*200	566	1	11	A709M Gr.345	
DHP25CA	PL 12*234	3445	1	76	A709M Gr.345	
DHP25CE	PL 12*200	3826	1	72	A709M Gr.345	
DHP25CF	PL 12*200	3988	1	75	A709M Gr.345	
DHP25CG	PL 12*200	2380	1	45	A709M Gr.345	
DHP25CH	PL 12*200	3492	1	69	A709M Gr.345	
DHF23CB	PL 12*120	2292	1	26	A709M Gr.345	
DHF23CC	PL 12*120	1685	1	19	A709M Gr.345	
DHF23CD	PL 12*120	366	1	4	A709M Gr.345	
DHF25CA	PL 12*120	3227	1	36	A709M Gr.345	
DHF25CE	PL 12*120	3626	1	41	A709M Gr.345	
DHF25CF	PL 12*120	3891	1	44	A709M Gr.345	
DHF25CG	PL 12*120	2280	1	26	A709M Gr.345	
DHF25CH	PL 12*120	3392	1	40	A709M Gr.345	
DEP03	PL 12*55	110	1	1	A709M Gr.345	
DEP04	PL 12*55	94	1	1	A709M Gr.345	
	S.TOTAL			13838		

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C25WA / B" (1)

SCALE
1 : 35

DRAWN
H.I.PARK

DESIGNED
K.W.CHOI

CHECKED
S.S.SONG

APPROVED
S.M.KHON

DATE ISSUED
2018.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-245

REV.
A

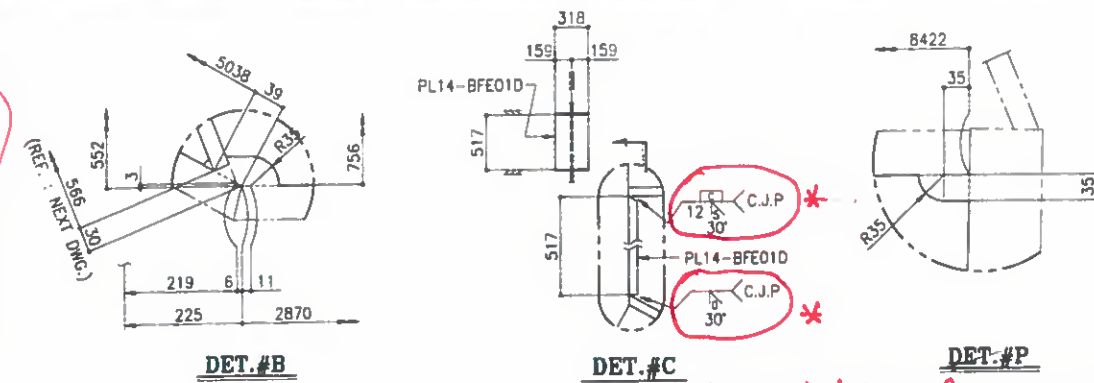
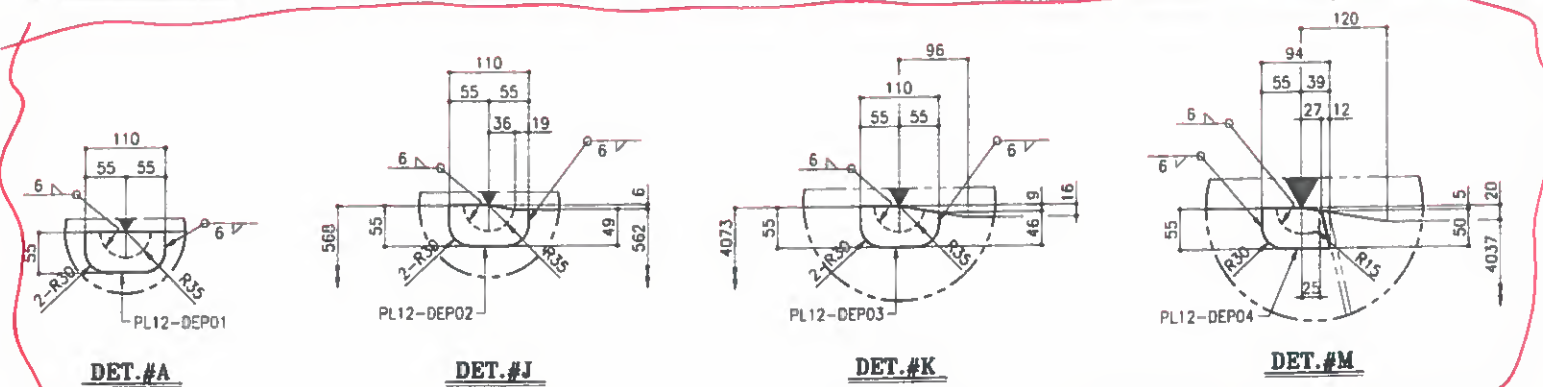
- NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP P= 35 , D= 15 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REF. DRAWING

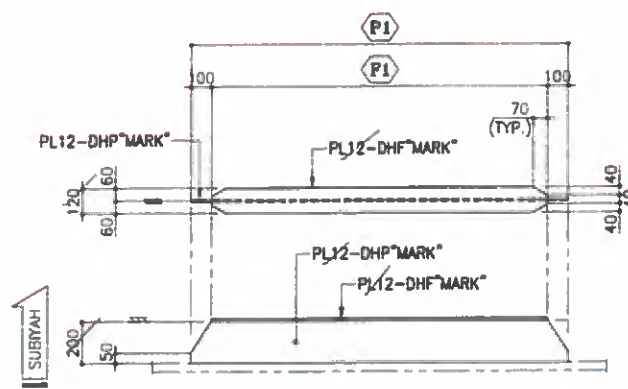
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Provide approved reference

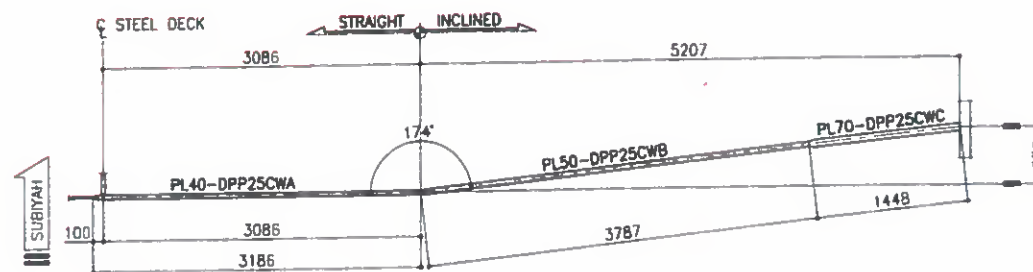


Provide reference

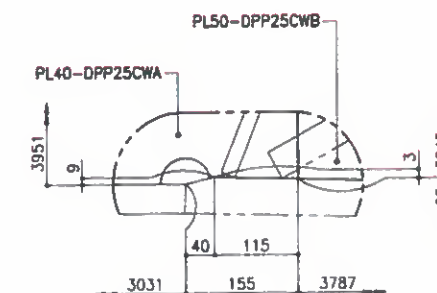


MARK	P1	P1
DHP23CB	2492	-
DHP23CC	1885	-
DHP23CD	566	-
DHF23CB	-	2292
DHF23CC	-	1685
DHF23CD	-	366

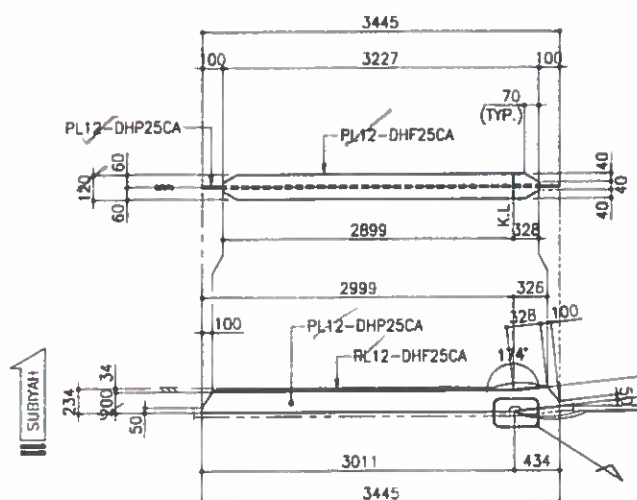
"PL12-DHP23CB~D" DETAIL
"PL12-DHF23CB~D" DETAIL



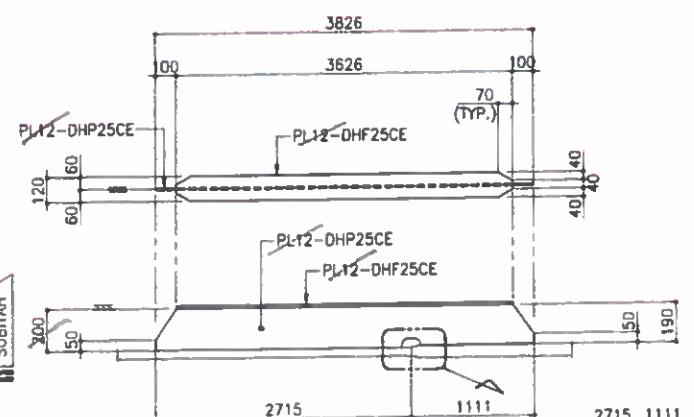
SECT. K-K



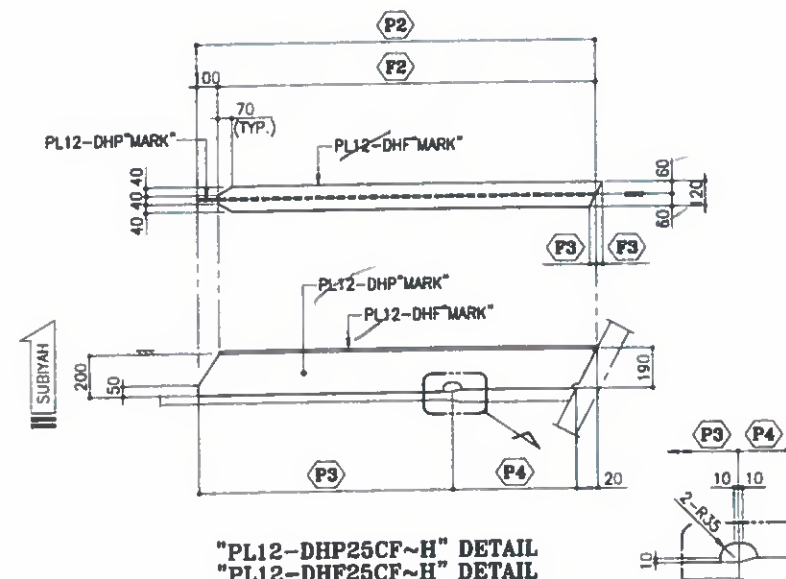
DET.#Q



"PL12-DHP25CA" DETAIL
"PL12-DHF25CA" DETAIL



"PL12-DHP25CE" DETAIL
"PL12-DHF25CE" DETAIL



"PL12-DHP25CF~H" DETAIL
"PL12-DHF25CF~H" DETAIL

MARK	P2	P3	P4	F2	F3
DHP25CF	3988	2533	1435	-	-
DHP25CG	2380	973	1387	-	-
DHP25CH	3492	2103	1369	-	-
DHF25CF	-	-	-	3888	3
DHF25CG	-	-	-	2280	0
DHF25CH	-	-	-	3392	0

NOTES

1. MATERIALS SEE D.O.B. UNLESS NOTED
2. SCALLOP R=30, C=15 UNLESS NOTED
3. ALL FILLET WELD : 6 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USU1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

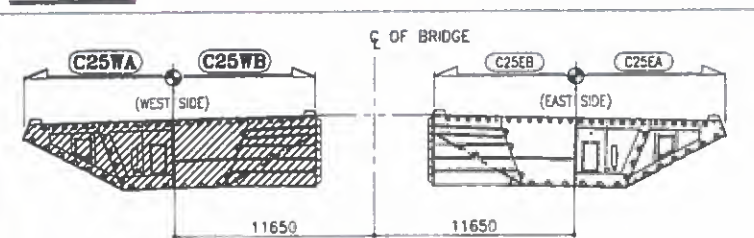
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C25WA / B" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

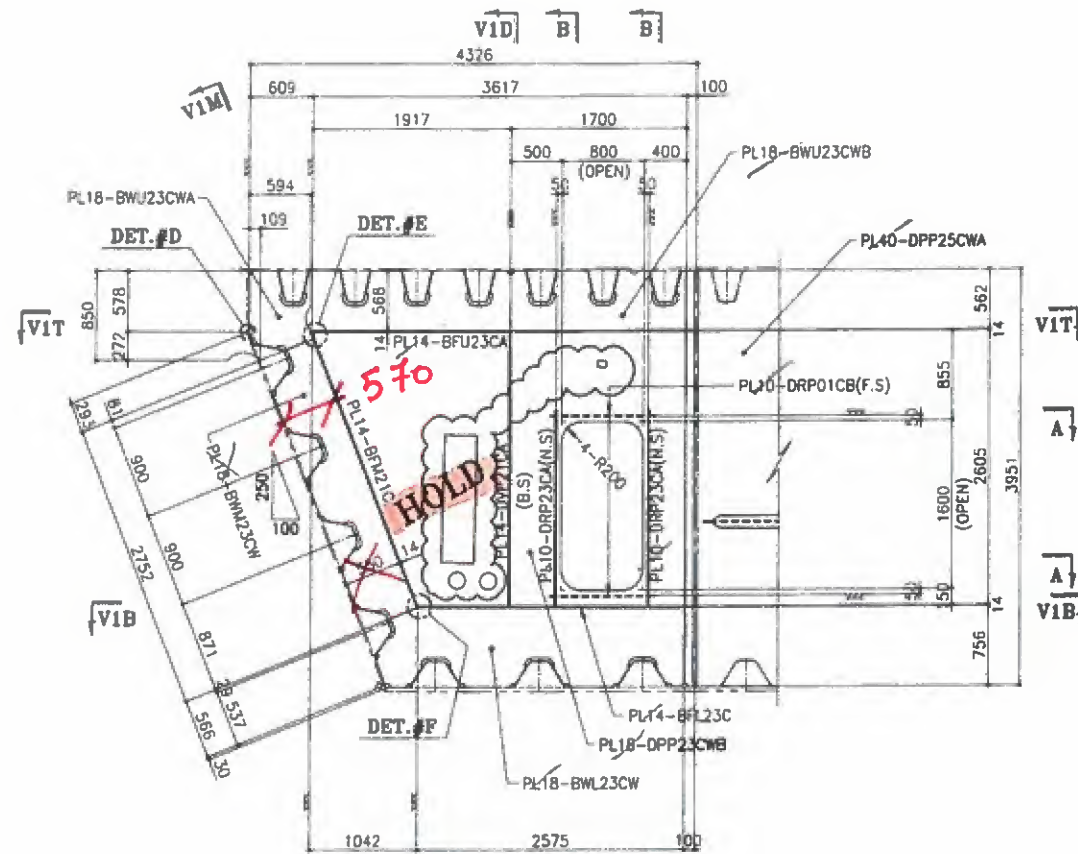
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-246
REV. A

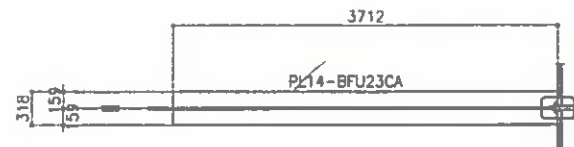
KEY-PLAN



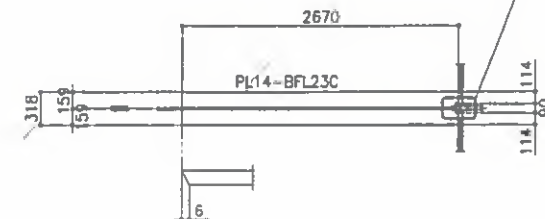
ON SCALE



VIEW #1

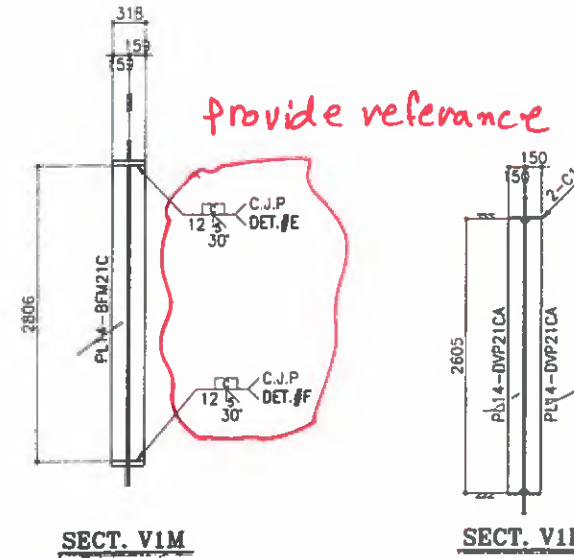
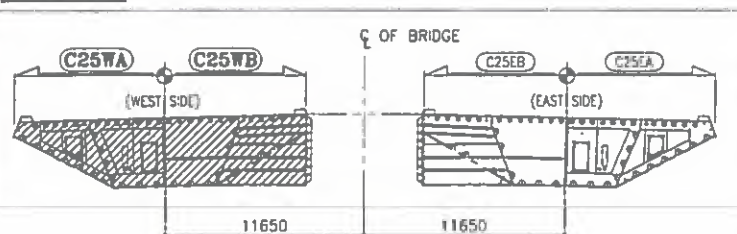


SECT. V1T-V1T



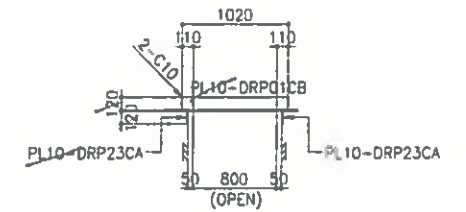
SECT. V1B-V1B

KEY-PLAN

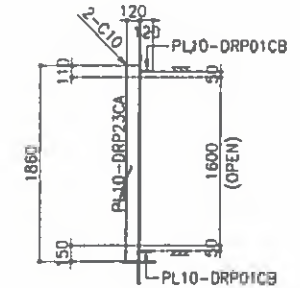


SECT. V1M

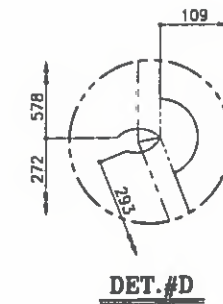
SECT. V1D



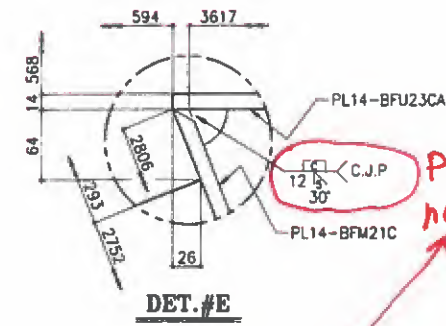
SECT. A



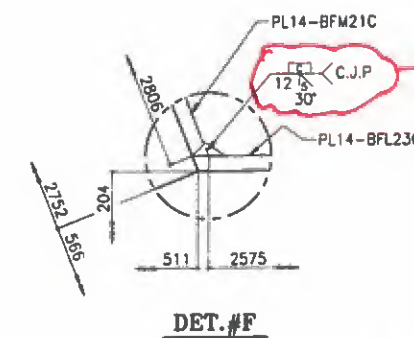
SECT. B



DET.#D



DET.#E



DET.#F

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

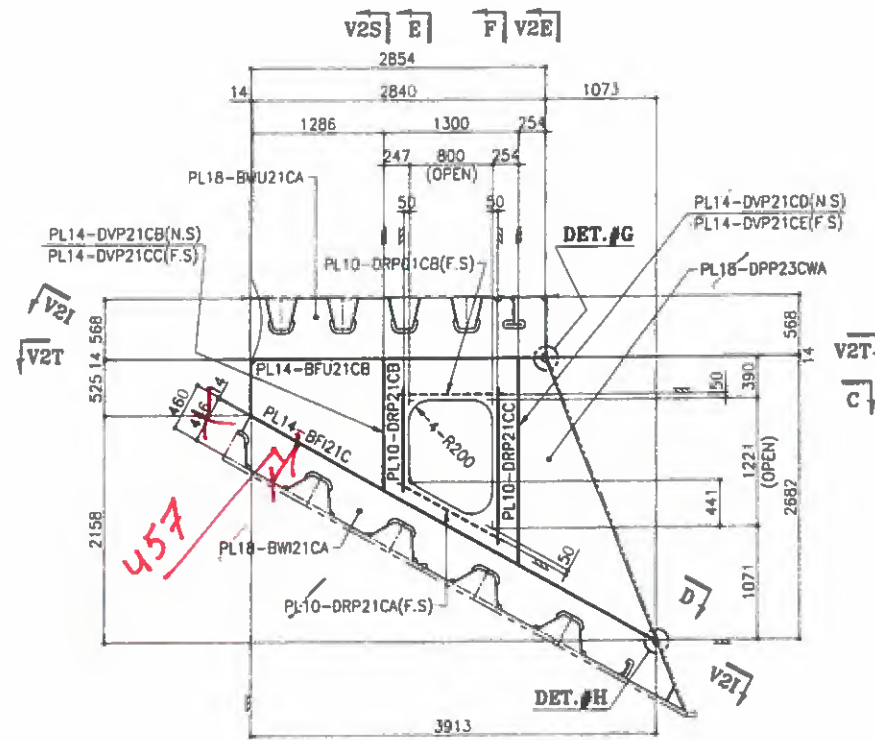
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C25WA / B" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

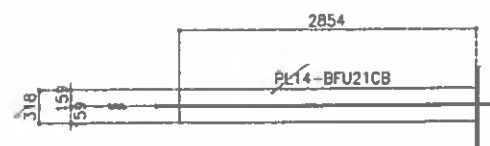
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-SEC-247
REV.
A

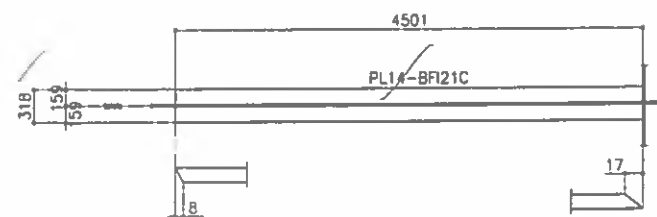
ON SCALE



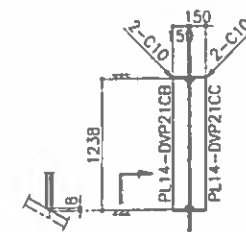
VIEW #2



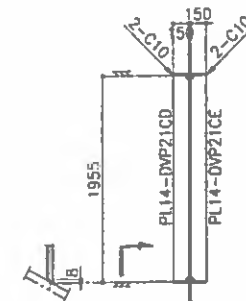
SECT. V2T-V2T



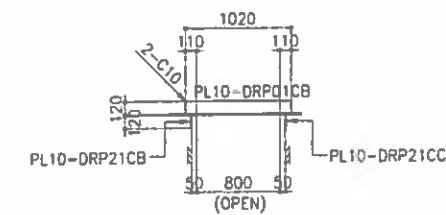
SECT. V2I-V2I



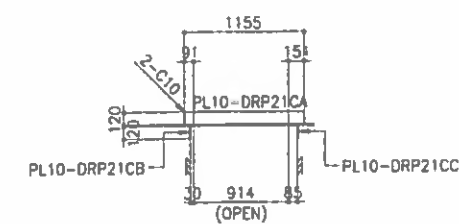
SECT. V2S



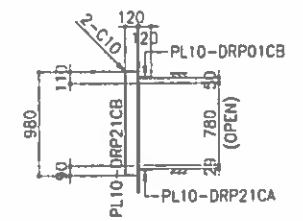
SECT. V2E



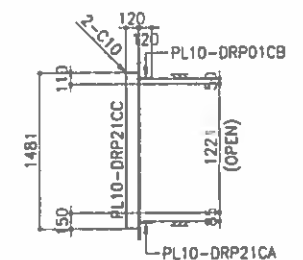
SECT. C



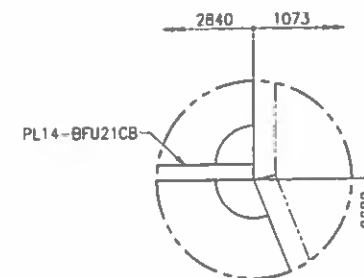
SECT. D



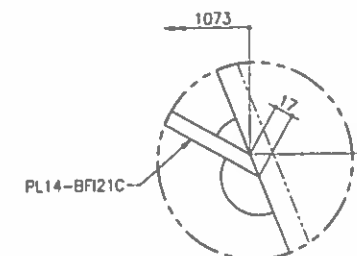
SECT. E



SECT. F



DET.#G



DET.#H

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE 

A	2018.02.25	FOR APPROVAL	HJLPAK	S.S. SONG	S.M. KOO
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C25WA / B" (4)

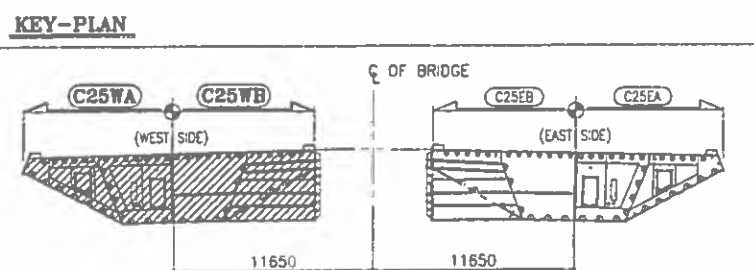
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Contracting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-248	A

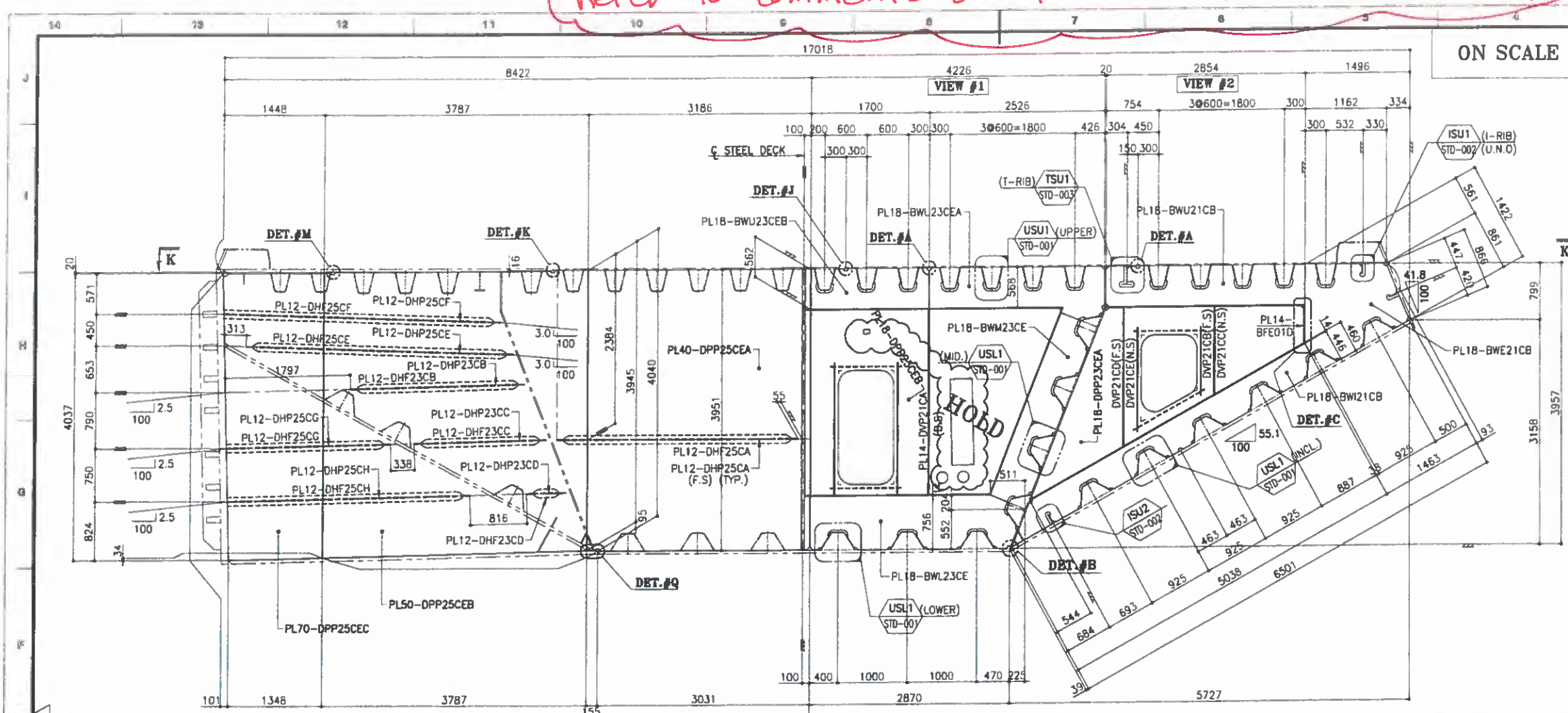


NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP $R = .35$, $\phi = .15$ UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

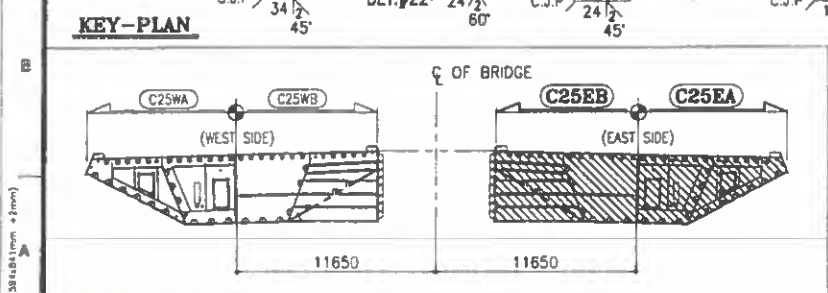
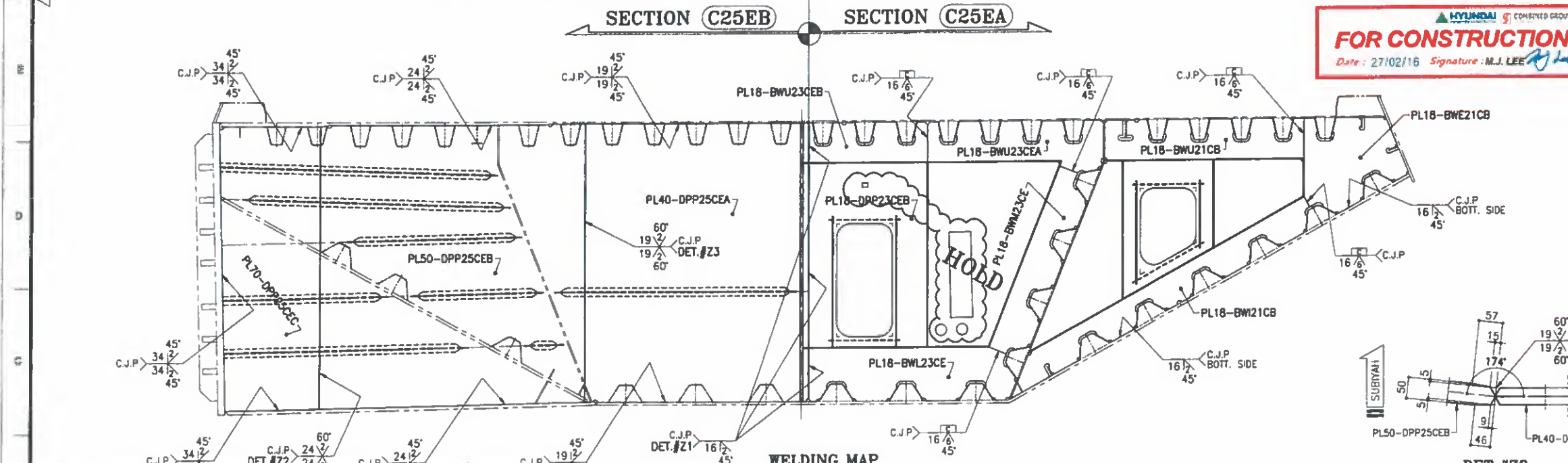
(Refer To Comments on DW. SD-SEC-245-A)



ON SCALE

BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK
C25EA	<DIAPHRAGM>	-	ONE		
BMU21CB	PL 18*568	2854	1	229	A709M Gr.345
BMU23CE	PL 18*850	2526	1	303	A709M Gr.345
BMU23CE	PL 18*568	1700	1	136	A709M Gr.345
BFU21CB	PL 14*318	3712	1	130	A709M Gr.345
BFU21CB	PL 14*318	2854	1	100	A709M Gr.345
BWL23CE	PL 18*756	3095	1	331	A709M Gr.345
BFL23C	PL 14*318	2670	1	93	A709M Gr.345
BMU21CB	PL 18*446	5038	1	317	A709M Gr.345
BFU21C	PL 14*318	4501	1	157	A709M Gr.345
BWE21CB	PL 18*1422	1556	1	313	A709M Gr.345
BFE01D	PL 14*318	517	1	18	A709M Gr.345
BWM23CE	PL 18*550	2752	1	214	A709M Gr.345
BFU21C	PL 14*318	2806	1	98	A709M Gr.345
DPP23CE	PL 18*2682	3913	1	1483	A709M Gr.345
DVP21CB	PL 14*150	1238	1	20	A709M Gr.345
DVP21CC	PL 14*150	1238	1	20	A709M Gr.345
DVP21CD	PL 14*150	1955	1	32	A709M Gr.345
DVP21CE	PL 14*150	1955	1	32	A709M Gr.345
DRP01CB	PL 10*120	1020	1	10	A709M Gr.345
DRP21CA	PL 10*120	1155	1	11	A709M Gr.345
DRP21CB	PL 10*120	980	1	9	A709M Gr.345
DRP21CC	PL 10*120	1481	1	14	A709M Gr.345
DRP23CE	PL 18*2605	3617	1	1331	A709M Gr.345
DVP21CA	PL 14*150	2605	2	86	A709M Gr.345
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345
DRP23CA	PL 10*120	1860	2	35	A709M Gr.345
DEP01	PL 12*55	110	2	1	A709M Gr.345
DEP02	PL 12*55	110	1	1	A709M Gr.345
S.TOTAL =				5545	
C25EB	<DIAPHRAGM>	-	ONE		
DPP25CEA	PL 40*3951	3186	1	3953	A709M Gr.345
DPP25CEB	PL 50*4040	3787	1	6005	A709M Gr.345
DPP25CEC	PL 70*4037	1448	1	3212	A709M Gr.345
DHP23CB	PL 12*200	2492	1	47	A709M Gr.345
DHP23CC	PL 12*200	1885	1	36	A709M Gr.345
DHP23CD	PL 12*200	566	1	11	A709M Gr.345
DHP25CA	PL 12*234	3445	1	76	A709M Gr.345
DHP25CE	PL 12*200	3826	1	72	A709M Gr.345
DHP25CF	PL 12*200	3988	1	75	A709M Gr.345
DHP25CG	PL 12*200	2380	1	45	A709M Gr.345
DHP25CH	PL 12*200	3492	1	69	A709M Gr.345
DHF23CB	PL 12*120	2292	1	26	A709M Gr.345
DHF23CC	PL 12*120	1685	1	19	A709M Gr.345
DHF23CD	PL 12*120	366	1	4	A709M Gr.345
DHF25CA	PL 12*120	3227	1	36	A709M Gr.345
DHF25CE	PL 12*120	3626	1	41	A709M Gr.345
DHF25CF	PL 12*120	3891	1	44	A709M Gr.345
DHF25CG	PL 12*120	2280	1	26	A709M Gr.345
DHF25CH	PL 12*120	3392	1	40	A709M Gr.345
DEP03	PL 12*55	110	1	1	A709M Gr.345
DEP04	PL 12*55	94	1	1	A709M Gr.345
S.TOTAL =				13838	

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



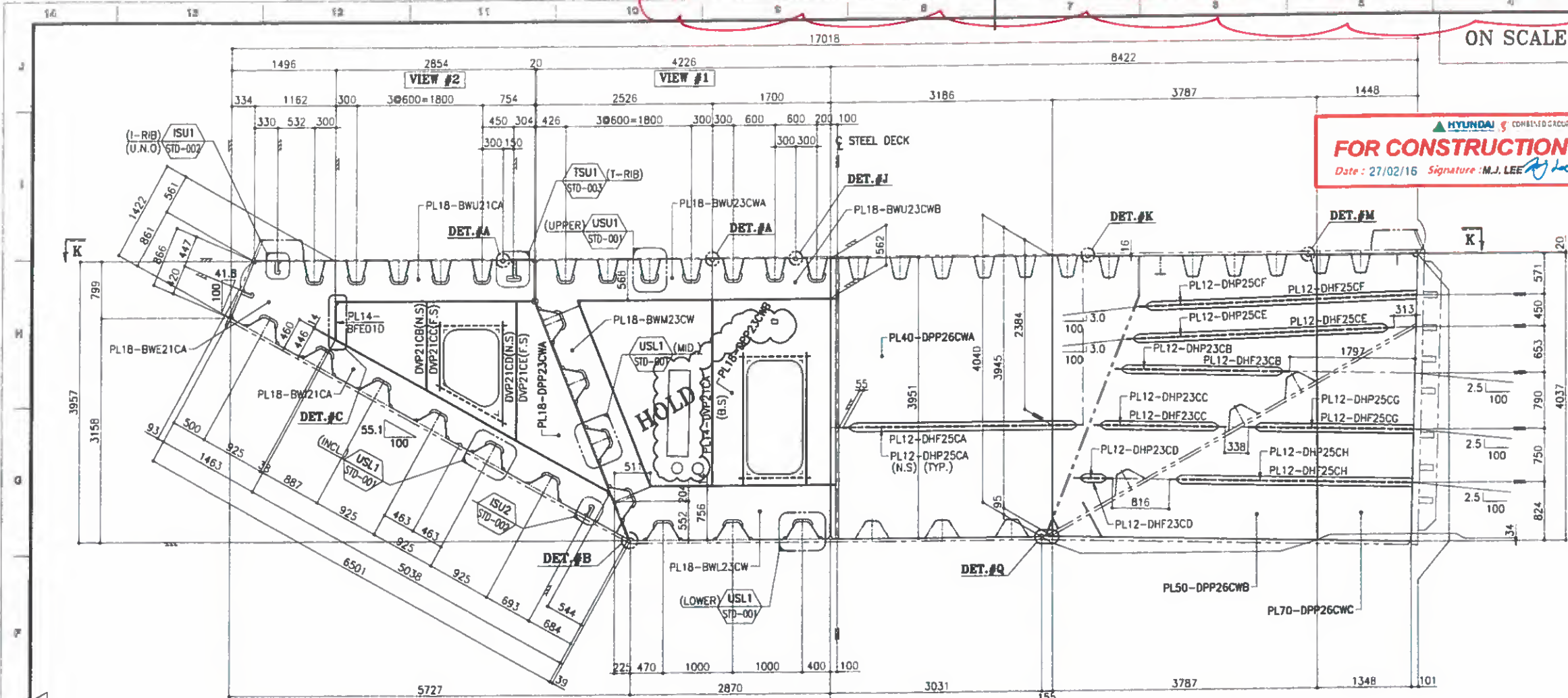
- NOTES
1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP R=35, O=15 mm UNLESS NOTED
 3. ALL FILLET WELD: 6 UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

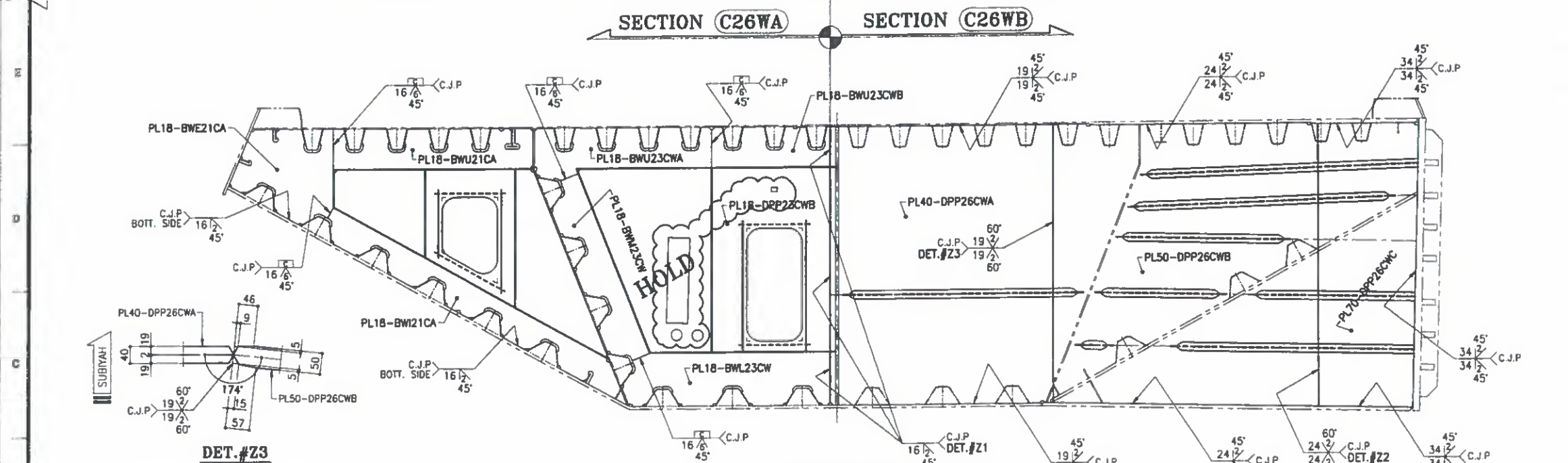
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION	
PROJECT TITLE SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140	
DRAWING TITLE MAIN BRIDGE STEEL DECK SECTION DETAIL "C25EA / B" (1)	
SCALE 1 : 35	DRAWN H.J.PARK
DESIGNED K.W.CHON	CHECKED S.S.SON
DATE ISSUED 2016.02.25	APPROVED S.M.KHON
CONTRACTOR HYUNDAI ENGINEERING & CONSTRUCTION Combined Group	
DRAWING NO. RA140-22-BRG-SD-SEC-249	REV. A

Refer To Comments on DW. SD-SEC-245-A

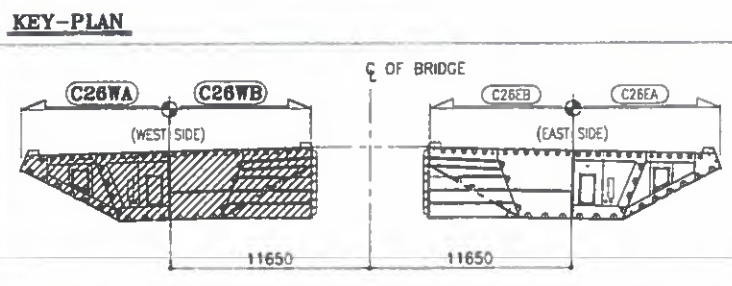


ON SCALE

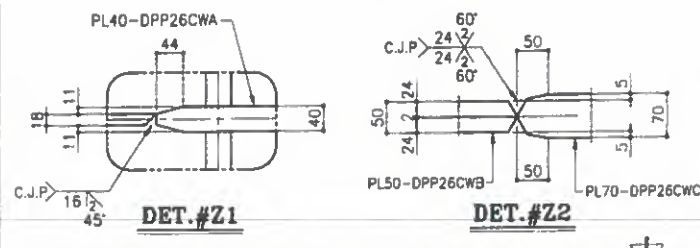
BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C26WA	<DIAPHRAGM>	-	ONE			
BWU21CA	PL 18*568	2854	1	229	A709M Gr.345	
BWU23CWA	PL 18*850	2526	1	303	A709M Gr.345	
BWU23CBW	PL 18*568	1700	1	136	A709M Gr.345	
BFU23CA	PL 14*318	3712	1	130	A709M Gr.345	
BFU21CB	PL 14*318	2854	1	100	A709M Gr.345	
BW123CW	PL 18*756	3095	1	331	A709M Gr.345	
BFL23C	PL 14*318	2670	1	93	A709M Gr.345	
BW121CA	PL 18*446	5038	1	317	A709M Gr.345	
BF121C	PL 14*318	4501	1	157	A709M Gr.345	
BWE21CA	PL 18*1422	1556	1	313	A709M Gr.345	
BFED1D	PL 14*318	517	1	18	A709M Gr.345	
BWM23CW	PL 18*550	2752	1	214	A709M Gr.345	
BFM21C	PL 14*318	2806	1	98	A709M Gr.345	
DPP23CWA	PL 18*2682	3913	1	1483	A709M Gr.345	
DVP21CB	PL 14*150	1238	1	20	A709M Gr.345	
DVP21CC	PL 14*150	1238	1	20	A709M Gr.345	
DVP21CD	PL 14*150	1955	1	32	A709M Gr.345	
DVP21CE	PL 14*150	1955	1	32	A709M Gr.345	
DRP01CB	PL 10*120	1020	1	10	A709M Gr.345	
DRP21CA	PL 10*120	1155	1	11	A709M Gr.345	
DRP21CB	PL 10*120	980	1	9	A709M Gr.345	
DRP21CC	PL 10*120	1481	1	14	A709M Gr.345	
DPP23CBW	PL 18*2605	3617	1	1331	A709M Gr.345	
DVP21CA	PL 14*150	2605	2	86	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP23CA	PL 10*120	1860	2	35	A709M Gr.345	
DEP01	PL 12*55	110	2	1	A709M Gr.345	
DEP02	PL 12*55	110	1	1	A709M Gr.345	
			S.TOTAL=	5545		
C26WB	<DIAPHRAGM>	-	ONE			
DPP26CWA	PL 40*3951	3186	1	3953	A709M Gr.345	
DPP26CBW	PL 50*4040	3787	1	6005	A709M Gr.345	
DPP26CWB	PL 70*4037	1448	1	3212	A709M Gr.345	
DHP23CB	PL 12*200	2492	1	47	A709M Gr.345	
DHP23CC	PL 12*200	1885	1	36	A709M Gr.345	
DHP23CD	PL 12*200	566	1	11	A709M Gr.345	
DHP25CA	PL 12*234	3445	1	76	A709M Gr.345	
DHP25CE	PL 12*200	3826	1	72	A709M Gr.345	
DHP25CF	PL 12*200	3988	1	75	A709M Gr.345	
DHP25CG	PL 12*200	2380	1	45	A709M Gr.345	
DHP25CH	PL 12*200	3492	1	69	A709M Gr.345	
DHF23CB	PL 12*120	2292	1	26	A709M Gr.345	
DHF23CC	PL 12*120	1685	1	19	A709M Gr.345	
DHF23CD	PL 12*120	366	1	4	A709M Gr.345	
DHF25CA	PL 12*120	3227	1	36	A709M Gr.345	
DHF25CE	PL 12*120	3626	1	41	A709M Gr.345	
DHF25CF	PL 12*120	3891	1	44	A709M Gr.345	
DHF25CG	PL 12*120	2280	1	26	A709M Gr.345	
DHF25CH	PL 12*120	3392	1	40	A709M Gr.345	
DEP03	PL 12*55	110	1	1	A709M Gr.345	
DEP04	PL 12*55	94	1	1	A709M Gr.345	
			S.TOTAL=	13838		



WELDING MAP



KEY-PLAN



DET. #Z1

DET.#Z2

- ## NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , D= 15 UNLESS NOTED
 3. ALL FILLET WELD :  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

A	2016.02.25	FOR APPROVAL	KJLWANG	S.S. SONG	S. LUCHON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
EMPLOYER					

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

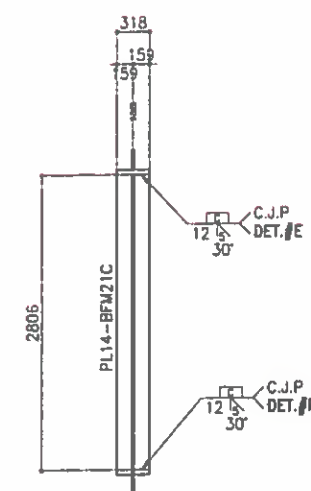
SECTION DETAIL "C26WA / B" (1)

560

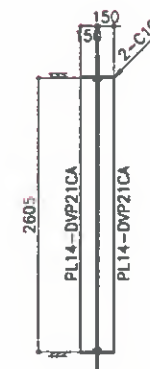
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR		 HYUNDAI ENGINEERING & CONSTRUCTION	 Combined Group Contracting Company
DRAWING NO.		RA140-22-BRG-SD-SEC-253	REV. A

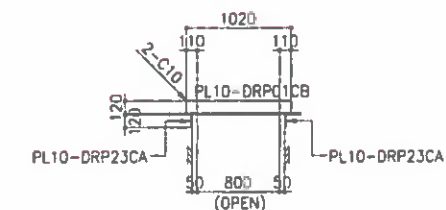
ON SCALE



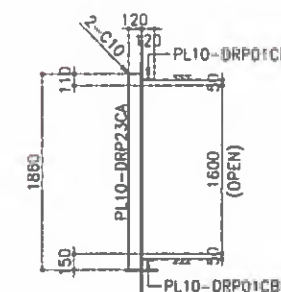
SECT. V1M



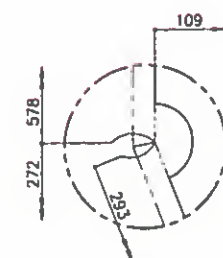
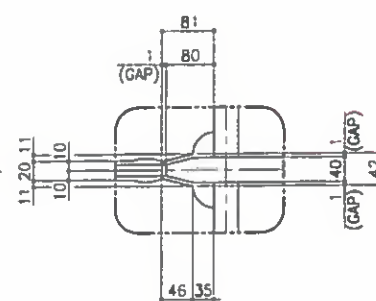
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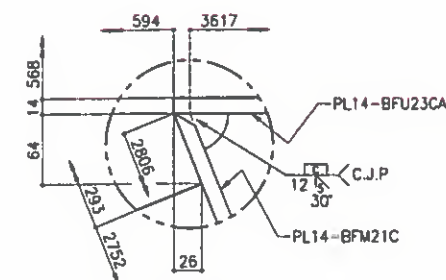
SECT. A



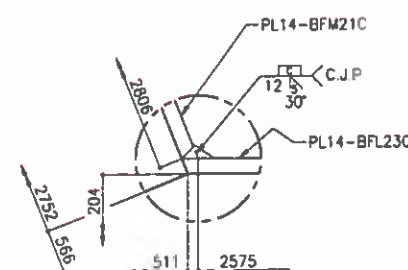
SECT. B



DET.#D



DET.#E



DET.#F

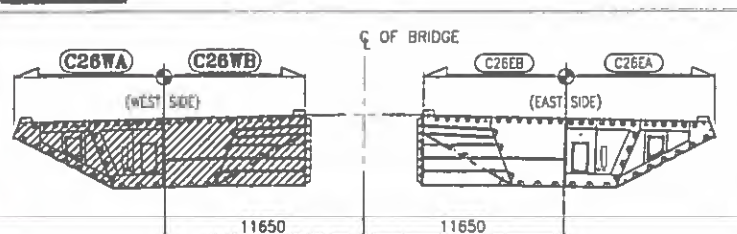
■ **REF. DRAWING**

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE D.O.D. UNLESS NOTED
2. SCALLOP R= 35 , ϕ = 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

A	2018.02.25	FOR APPROVAL	HJ PARK	EE SCHOF	S.M. JON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C26WA / B" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 15	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.

RA140-22-BRG-SD-SEC-255

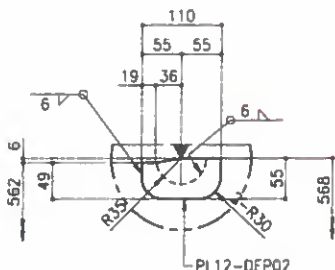
REY

1

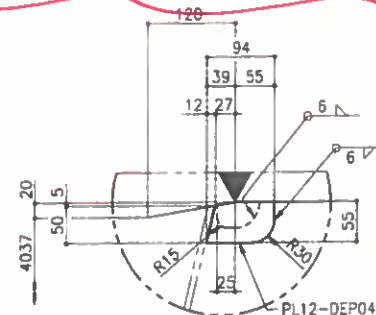
ON SCALE



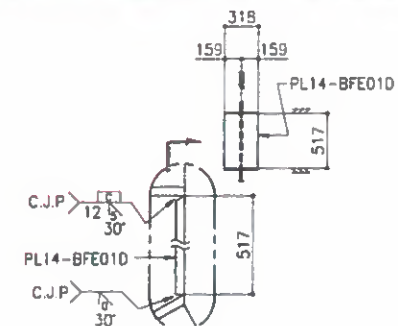
Refer To Comments on Draw. No. SD-SEC-246-A



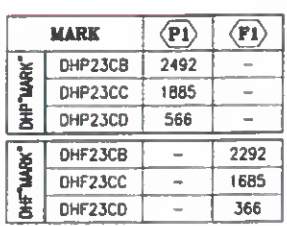
DET.#J



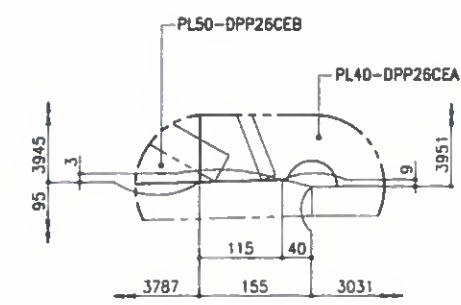
DET.#M



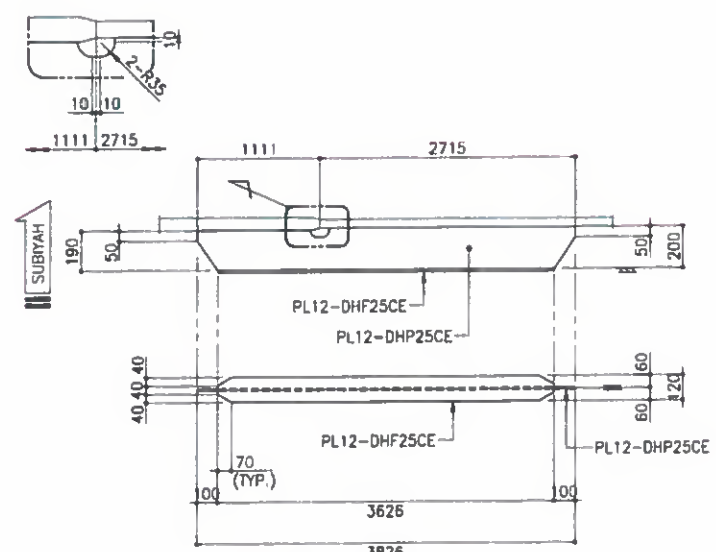
DET.#C



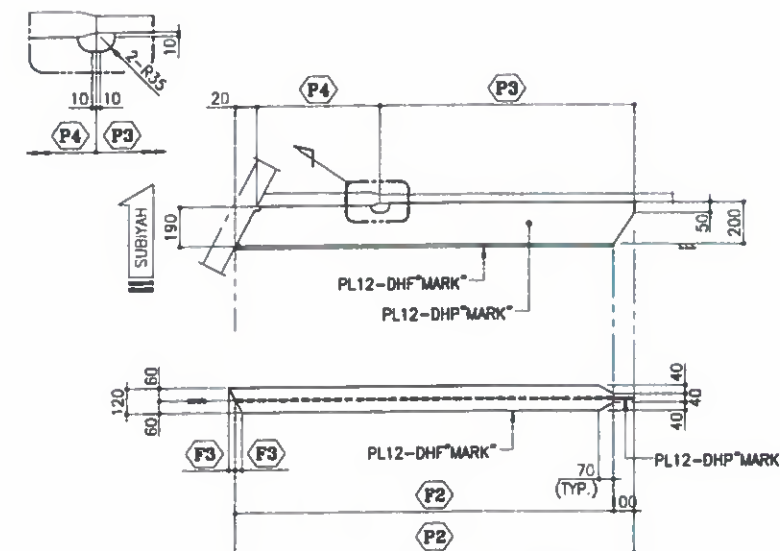
SECT. K-K



DET.#Q

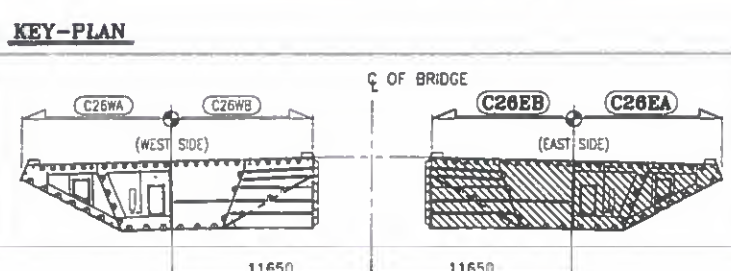


"PL12-DHP25CE" DETAIL
"PL12-DHF25CE" DETAIL



"PL12-DHP25CF~H" DETAIL
 "PL12-DHF25CF~H" DETAIL

MARK		P2	P3	P4	F2	F3
DHF MARK	DHF25CF	3988	2533	1435	-	-
	DHF25CG	2380	973	1387	-	-
	DHF25CH	3492	2103	1369	-	-
DHF MARK	DHF25CF	-	-	-	3888	3
	DHF25CG	-	-	-	2280	0
	DHF25CH	-	-	-	3392	0



1. MATERIALS SEE D.O.B. UNLESS NOTED
2. SCALLOP R= 35, C= 15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

MARK	REF. DWG. NO.:
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

A	2011.02.25	FOR APPROVAL	MURPHY JR	S.S. SONG	S.M. KO
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

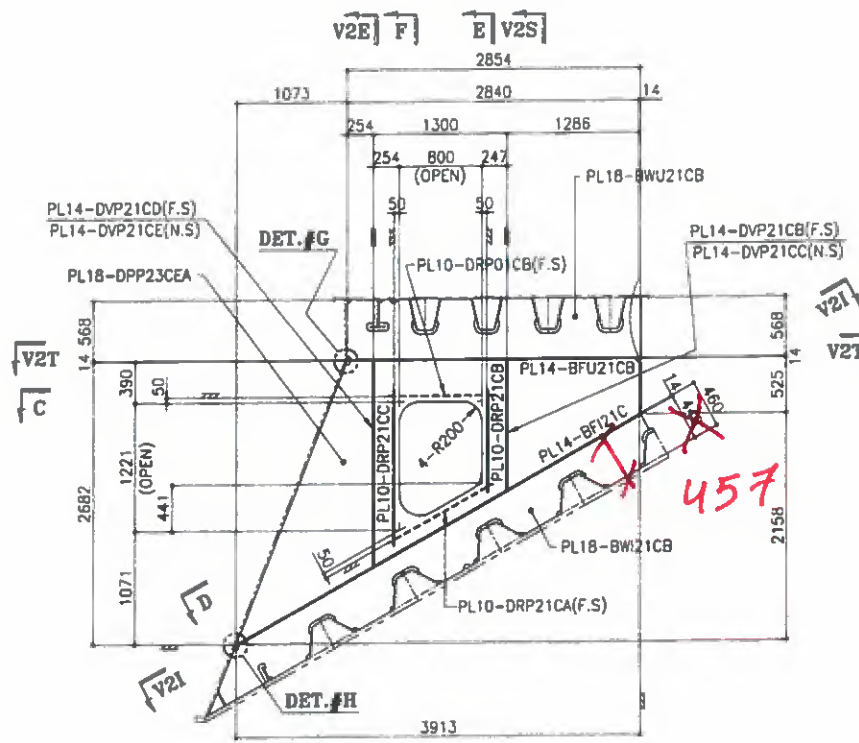
**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C26EA / B" (2)

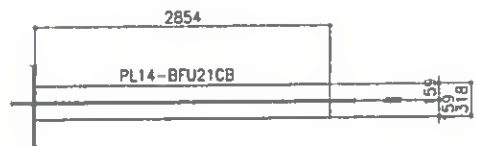
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR				
 HYUNDAI ENGINEERING & CONSTRUCTION		 Combined Group Contracting Company		
DRAWING NO.				REV
RA140-22-BRG-SD-SEC-258				A

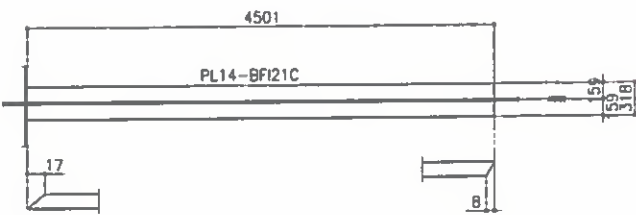
ON SCALE



VIEW #2

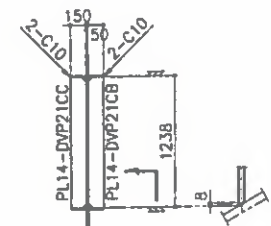
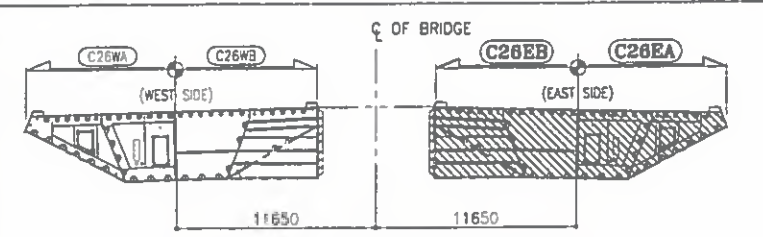


SECT. V2T-V2T

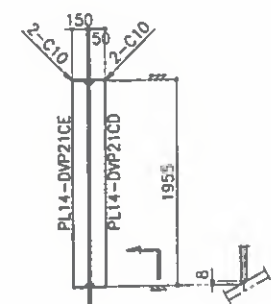


SECT. V2I-V2I

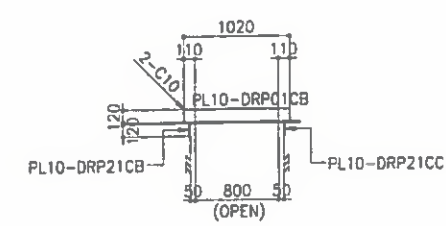
KEY-PLAN



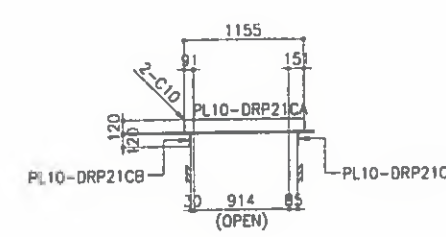
SECT. V2S



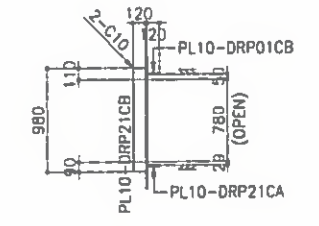
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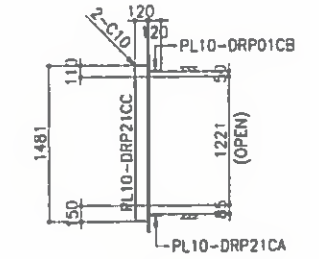
SECT. C



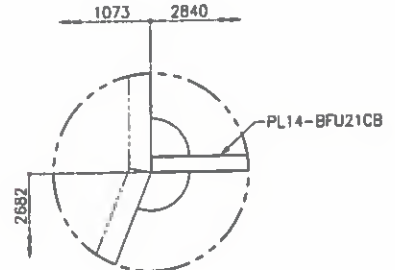
SECT. D



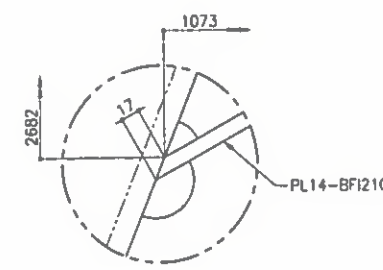
SECT. E



SECT. F



DET.#G



DET.#H

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1, ISU2	SD-STD-002
TSU1	SD-STD-003

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35, O= 15 UNLESS NOTED
 3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C26EA / B" (4)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
Engineering & Construction
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-SEC-260

REV.
A

Architectural floor plan of a building with four wings, showing room layouts, dimensions, and structural details. The plan includes a central corridor system and four wings labeled DET.#D, DET.#E, DET.#F, and DET.#G. Rooms are identified by codes such as PL18-BWU41CWD, PL14-BFU21CA, and PL10-DRP01CB. Dimensions are provided in feet and inches. Structural details like columns and walls are indicated by symbols and labels.

Technical drawing of a rectangular plate. The overall width is 7507. The overall height is 316. The plate has a central rectangular area with a width of 51 and a height of 54. The part number PL14-BFU21CA is printed in the center of the plate.

5423

PL14-BFL21C

318

159

159

6

SECT. V1B-V1B

6

Diagram showing cross-sections of bridge piers C41W (West Side) and C44E (East Side). The piers are labeled with their respective stationing: 11650 for C41W and 11650 for C44E. The piers are shown in plan view, with the centerline of the bridge indicated by a vertical line labeled 'C OF BRIDGE'.

Technical drawing of a rectangular plate. The overall width is 2605. The overall height is 150. The plate is divided into two sections, both labeled PL14-DVP21CA. The top section has a height of 150. The bottom section has a height of 150. The plate is labeled 2-C10.

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

on hold

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**


دولة الكويت
وزارة الأشغال العامة
إدارة الطرق
Ministry of Public Works
Roads Administration

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

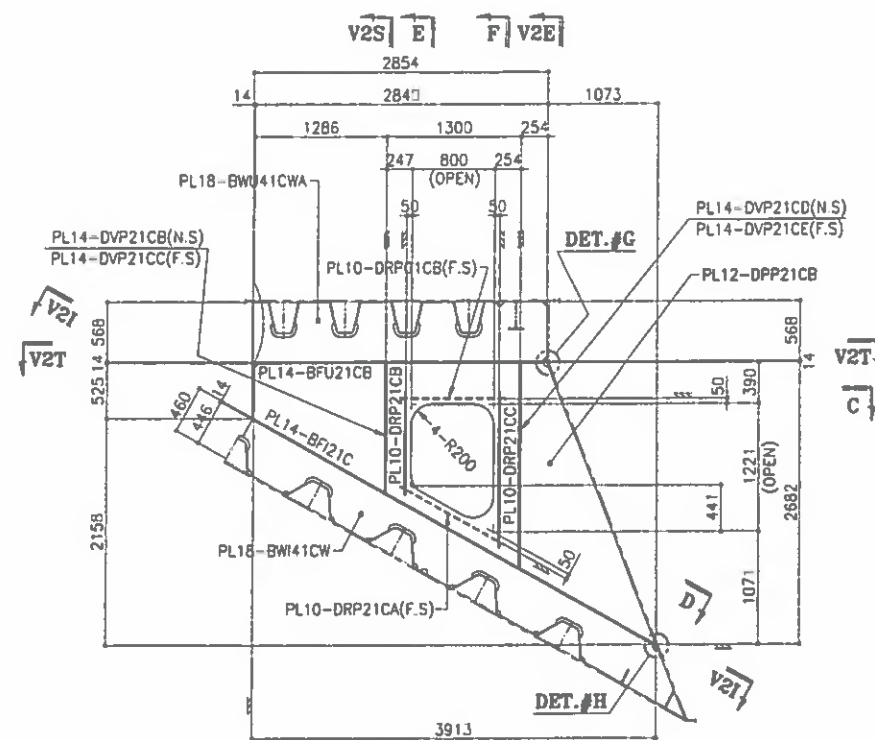
SECTION DETAIL "C41W" (2)

NOTES

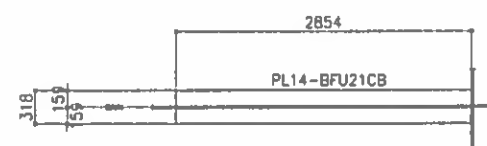
1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

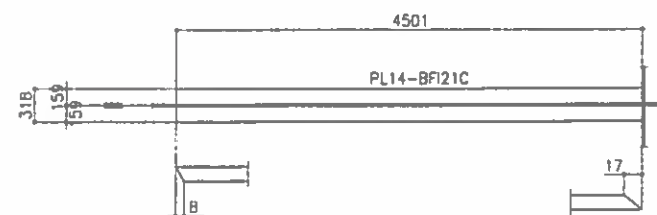
ON SCALE



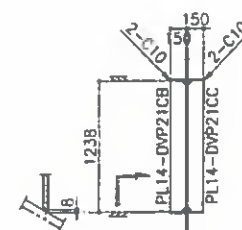
VIEW #2



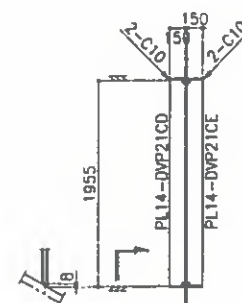
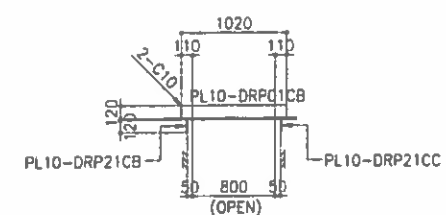
SECT. V2T-V2T



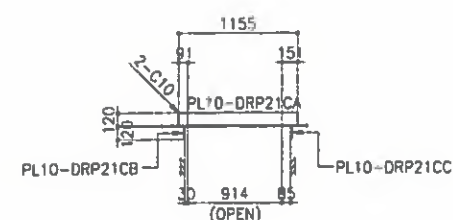
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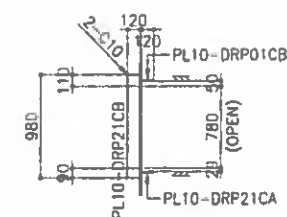
SECT. V2S

SECT. V2E

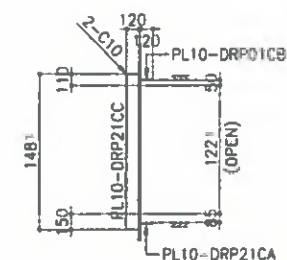
SECT. C



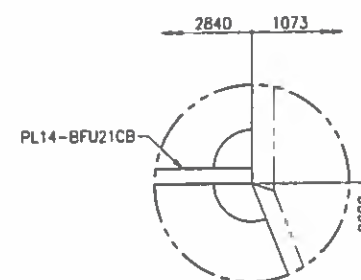
SECT. D



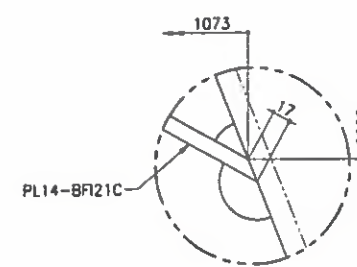
SECT. E



SECT. F



DET.#G



DET.#H

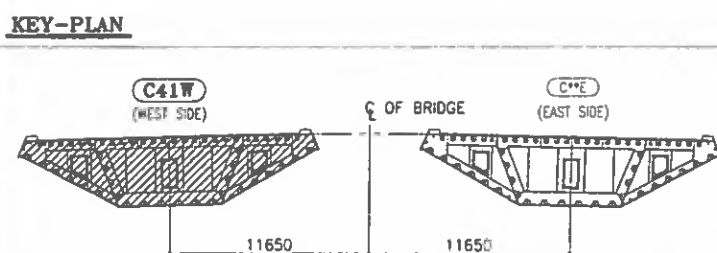
REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE D.O.W. UNLESS NOTED
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL

HYUNDAI E&SI
YOULCHON




HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
 Date : 27/02/16 Signature : M.J. LEE 

On hold

A	2016.02.25	FOR APPROVAL	H. PARK JR	S.S. SINGH	S. MURPHY
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROVED

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C41W" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 = 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

2015-2016	CONTRACTOR
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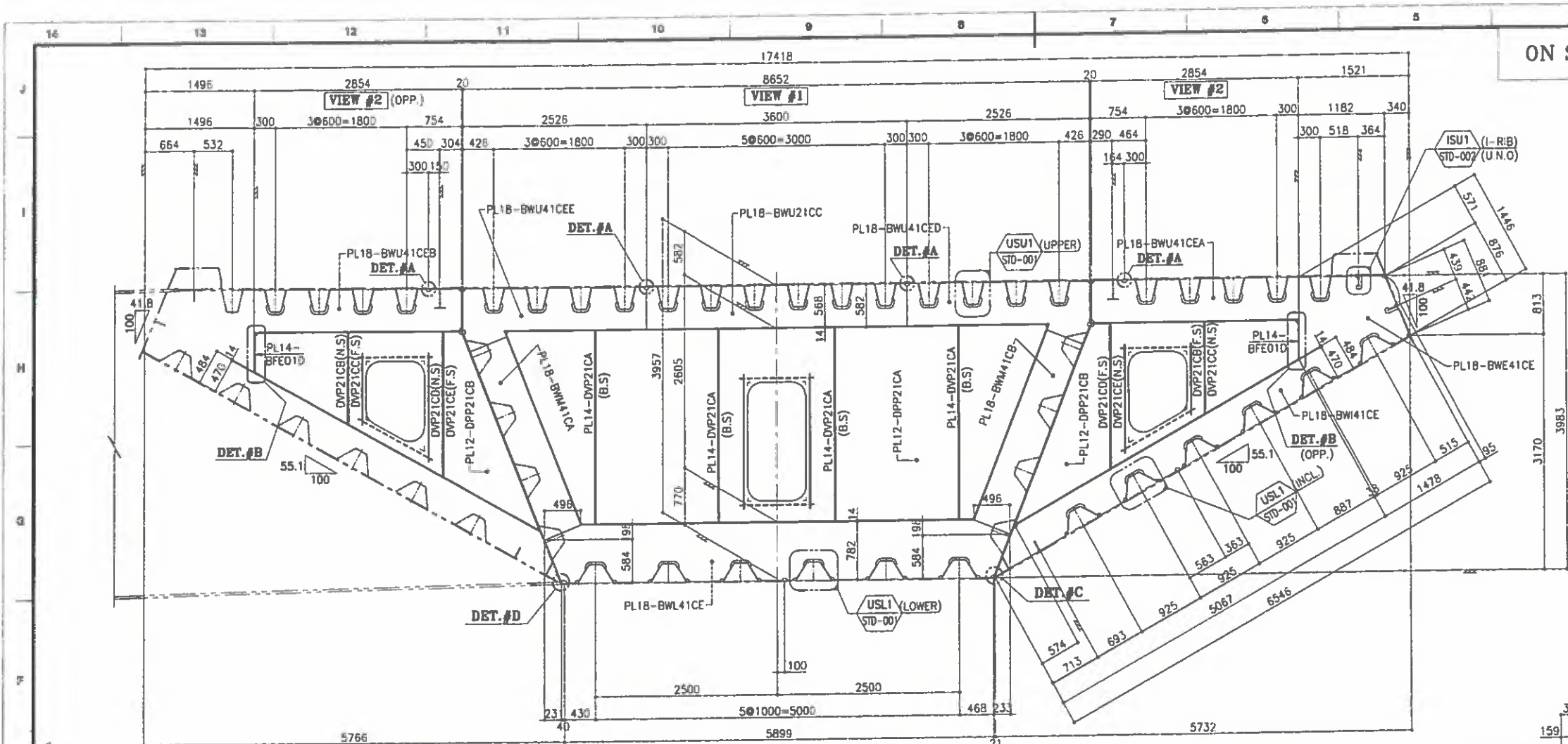


DRAWING NO.

RA140-22-BRG-SD-SEC-403

REV.

A

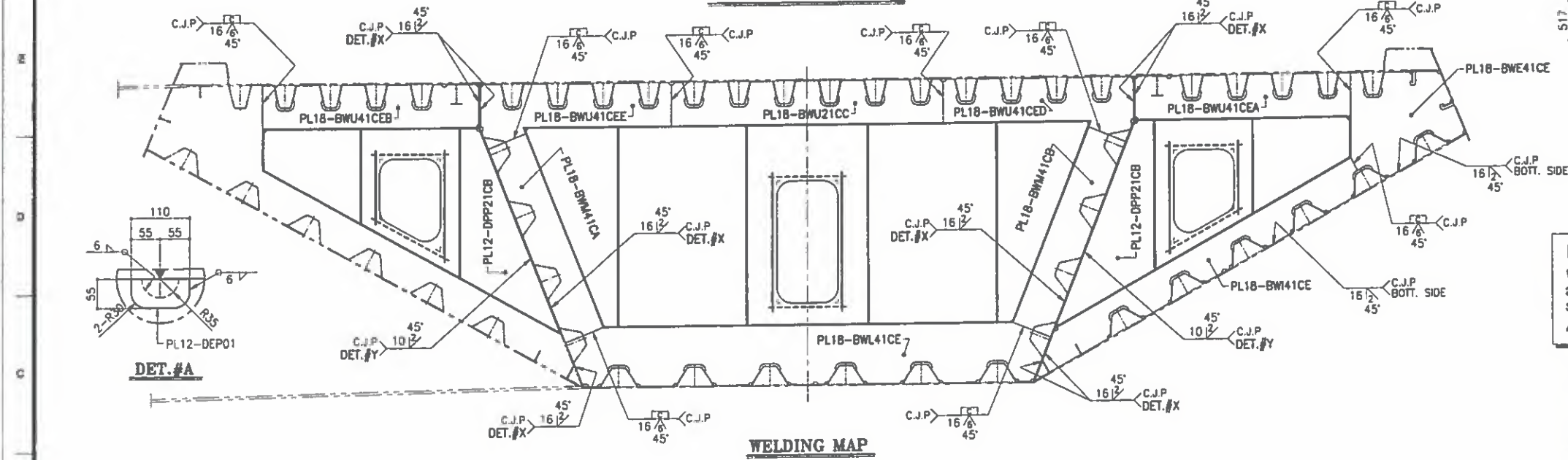


ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
C41E	<DIAPHRAGM>	-	ONE			
BWU41CEA	PL 18*568	2854	1	229	A709M Gr.345	
BWU41CEB	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CC	PL 18*568	3600	1	289	A709M Gr.345	
BWU41CED	PL 18*568	2526	1	304	A709M Gr.345	
BWU41CEE	PL 18*568	2526	1	304	A709M Gr.345	
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345	
BFU21CB	PL 14*318	2854	2	199	A709M Gr.345	
BWL41CE	PL 18*782	6403	1	708	A709M Gr.345	
BFL21C	PL 14*318	5423	1	190	A709M Gr.345	
BWU41CE	PL 18*470	5067	1	337	A709M Gr.345	
BFL21C	PL 14*318	4501	2	315	A709M Gr.345	
BWE41CE	PL 18*1446	1573	1	321	A709M Gr.345	
BFE01D	PL 14*318	517	1	18	A709M Gr.345	
BWU41CA	PL 18*534	2744	1	207	A709M Gr.345	
BWU41CB	PL 18*534	2744	1	207	A709M Gr.345	
BWU21C	PL 14*318	2806	2	196	A709M Gr.345	
DPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345	
DPP21CB	PL 14*150	2605	8	344	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DPP21CB	PL 12*2682	3913	2	1977	A709M Gr.345	
DPP21CB	PL 14*150	1238	2	41	A709M Gr.345	
DPP21CC	PL 14*150	1238	2	41	A709M Gr.345	
DPP21CD	PL 14*150	1955	2	64	A709M Gr.345	
DPP21CE	PL 14*150	1955	2	64	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP21CA	PL 10*120	1155	2	22	A709M Gr.345	
DRP21CB	PL 10*120	980	2	18	A709M Gr.345	
DRP21CC	PL 10*120	1481	2	28	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				8824		

SECTION (C41E)



WELDING MAP

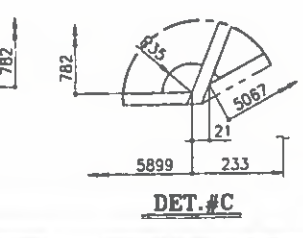
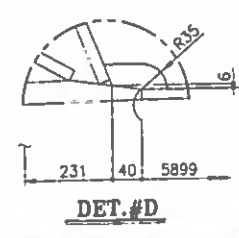
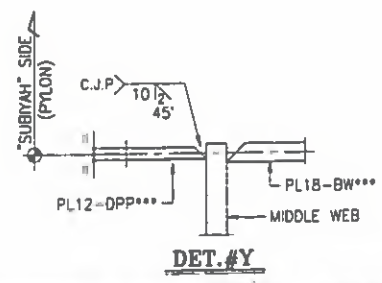
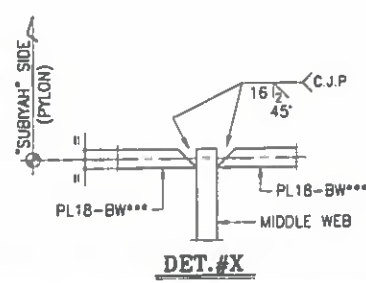
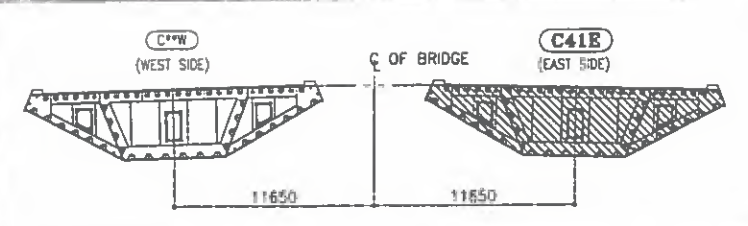
NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. ROLLUP R= 35, D= 15, UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{2}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

KEY-PLAN



FOR APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

On hold

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROD.
------	------	-------------------------	-------	-------	---------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C41E" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&SI
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-404
REV
A

7507

318

150

50

118

PL14-BFU21CA

5423

318

159

PL14-BFL21C

SECT. V1B-V1B

5423

The diagram shows a cross-section of a bridge with two main sections: the West Side (labeled C*W) and the East Side (labeled C41E). A central vertical line marks the center of the bridge (C OF BRIDGE). The width of each side from the center line is 11650 units. The West Side is shown with a truss-like internal structure, while the East Side is filled with diagonal hatching.

318
159
159
2805
PL14-BEM21C
12 1/2
30°
C.J.P. DET. #E
12 1/2
30°
C.J.P. DET. #E

Technical drawing of the front view of a rectangular plate. The overall width is 1020, divided into three sections: 110, 800, and 110. The overall height is 120. The plate is labeled PL10-DRP01CB at the top center, PL10-DRP01CA at the bottom left and right, and (OPEN) at the bottom center. A 2-C10 label is positioned near the top left corner. The drawing shows a central rectangular area with a width of 800 and a height of 120, flanked by two side sections of width 110 each. The bottom section is labeled (OPEN).

MARK	REF. DWG. NO.:
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= .35, C= .15 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

on hold

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**



دولة الكويت
وزارة الأشغال العامة
إدارة الطرق

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C41E" (2)

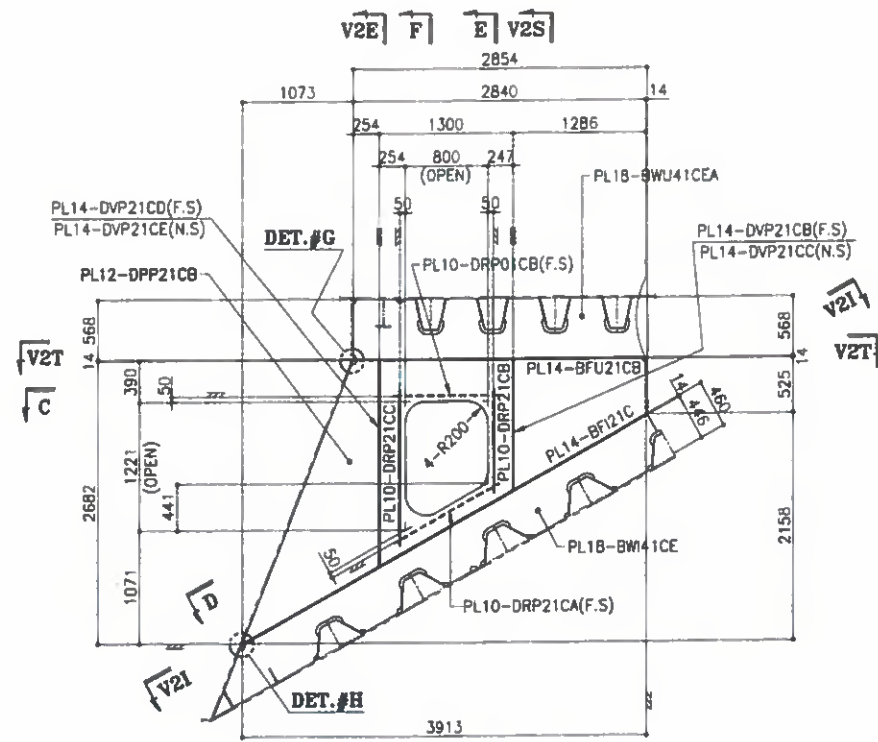
CONTRACTOR

 **HYUNDAI**
Engineering & Construction

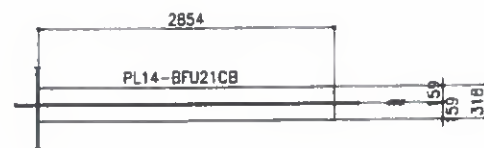
 **Combined Group**
Cooling Company

DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-405	A

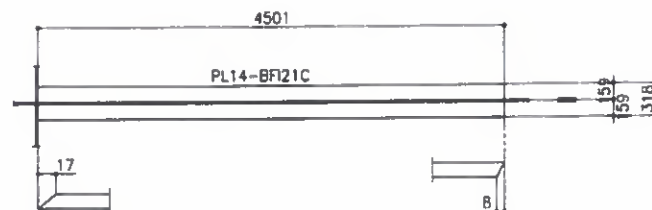
ON SCALE



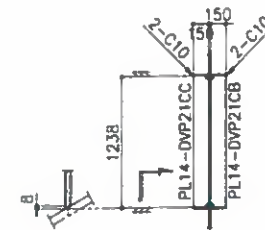
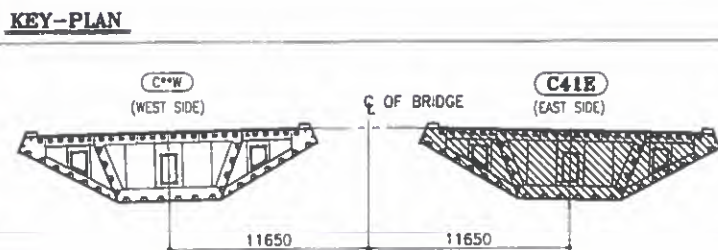
VIEW #2



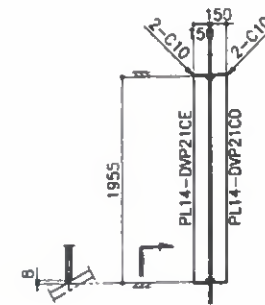
SECT. V2T-V2T



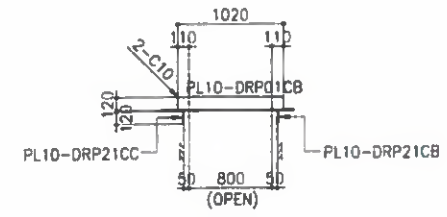
SECT. V2I-V2I



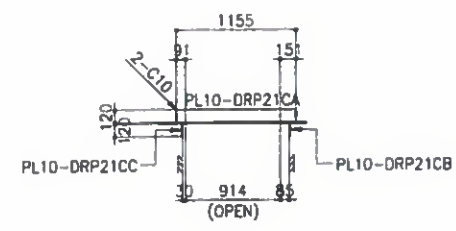
SECT. V2S



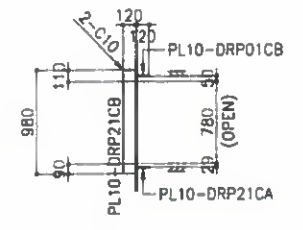
SECT. V2E



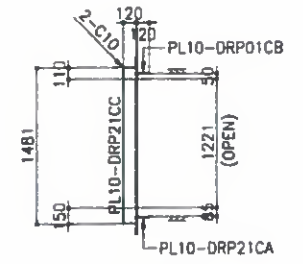
SECT. C



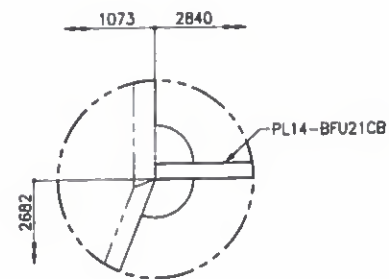
SECT. D



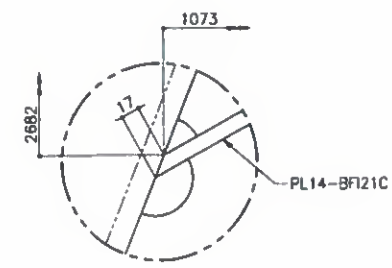
SECT. E



SECT. F



DET.#G



DET.#H

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1	SD-STD-001
ISU1	SD-STD-002

- ## NOTES

1. MATERIALS SEE D.O.W. UNLESS NOTED
2. SCALLOP R= 35 , C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

on hold

A	2018.02.25	FOR APPROVAL	H. PARK	S. SON	S. MOON
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

SECTION DETAIL "C41E" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR	
------------	--



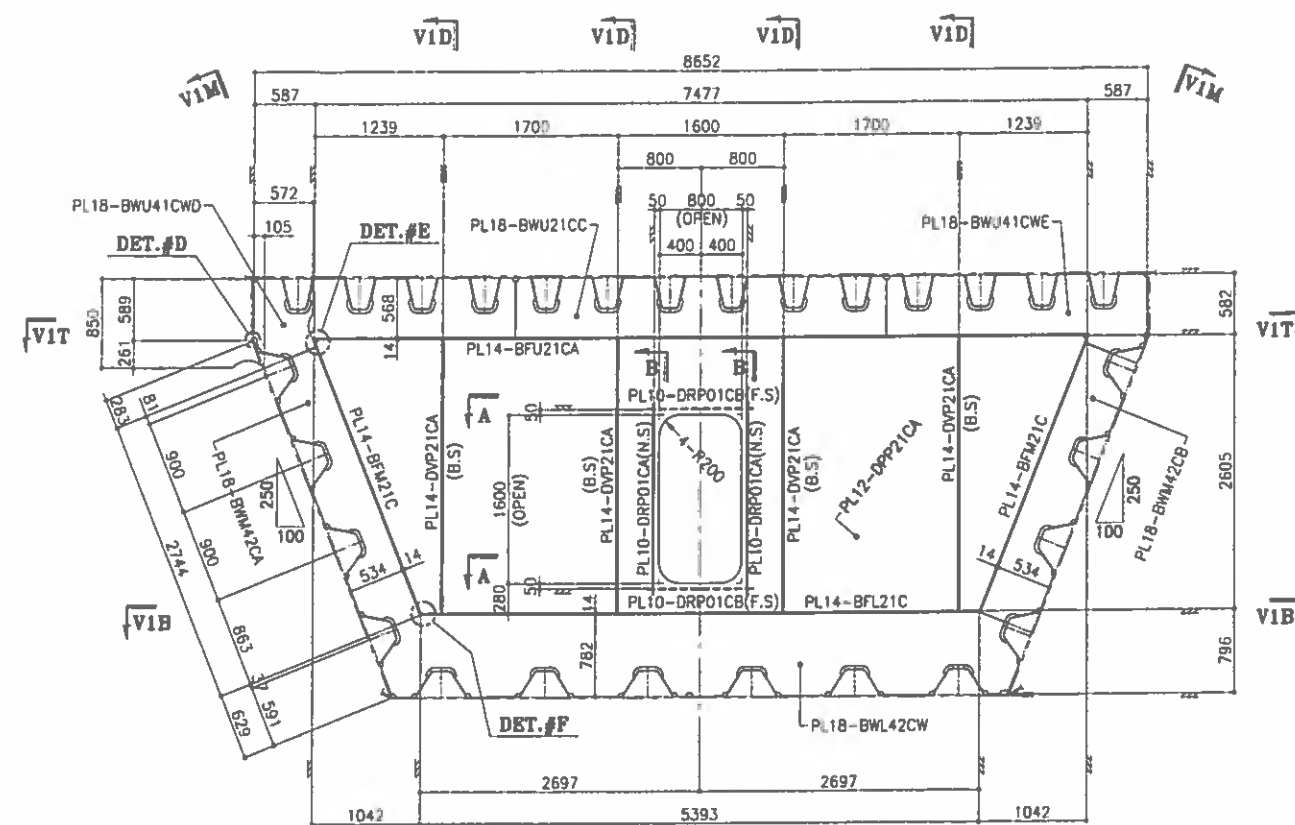
DRAWING NO.

RA140-22-BRG-SD-SEC-406

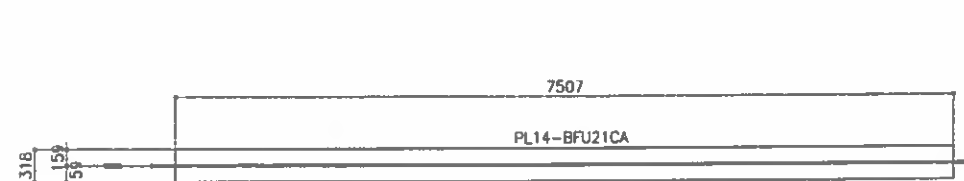
EV.

A

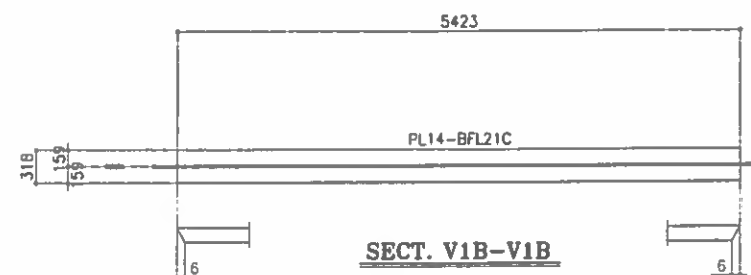
ON SCALE



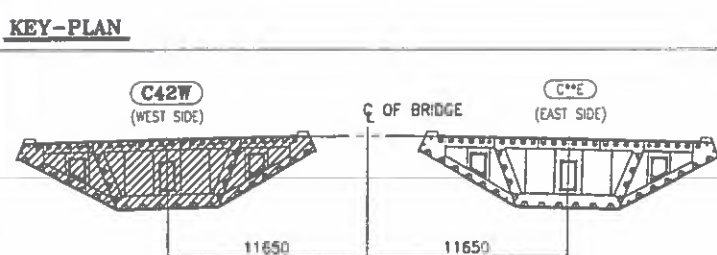
VIEW #1



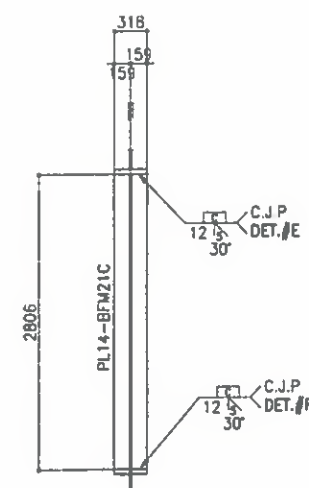
SECT. V1T-V1T



SECT. V1B-V1B



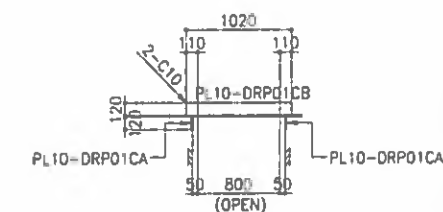
KEY-PLAN



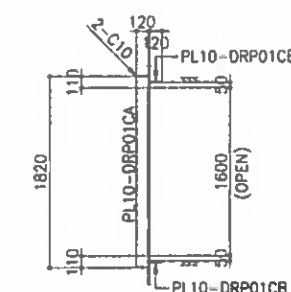
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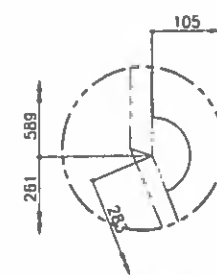
SECT. V1D



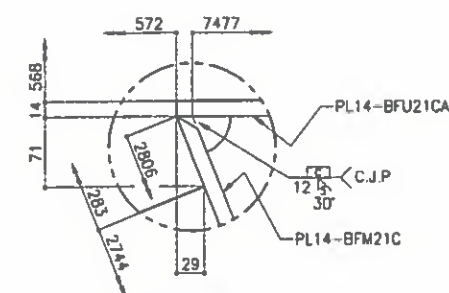
SECT. A



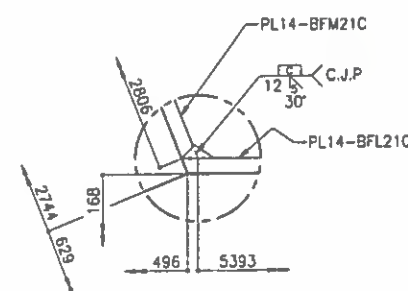
SECT. B



DET.#D



DET.#E



DET.#F

REF. DRAWING	
MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE P.O.M. UNLESS NOTED
2. SCALLOP R= 35, D= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

on hold

A	2016.02.23	FOR APPROVAL	HUPARK	ES. 504	5.12.04
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C42W" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

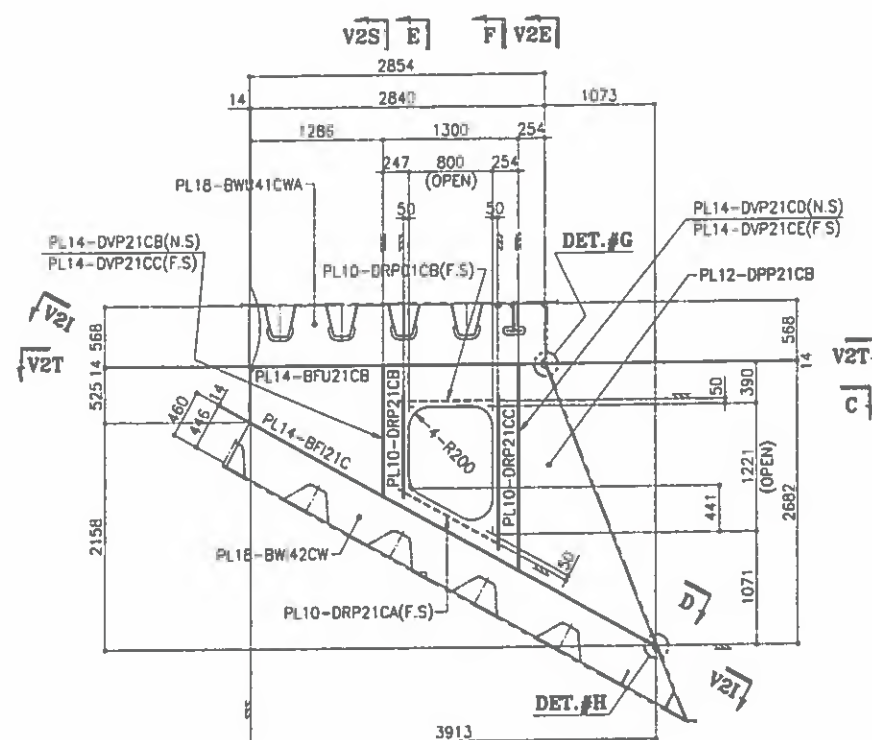
DRAFTING NO.

RA140-22-BRG-SD-SEC-408

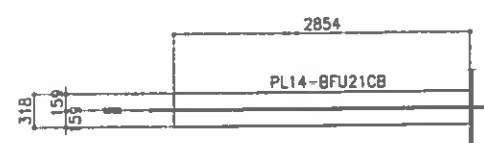
Time	10:00
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A

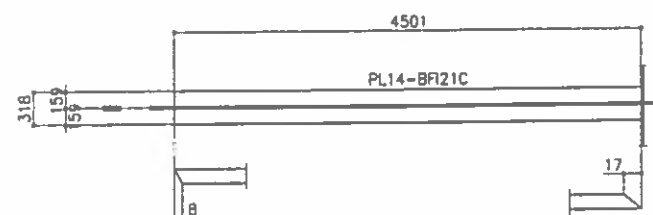
ON SCALE



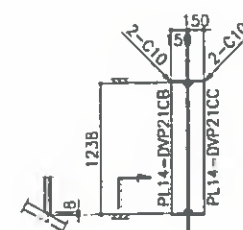
VIEW #2



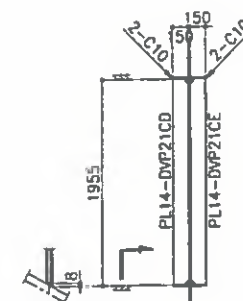
SECT. V2T-V2T



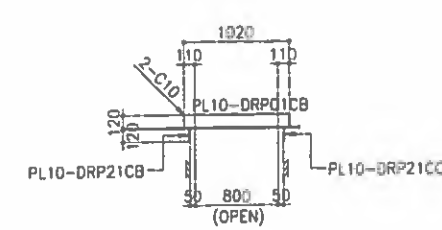
SECT. V2I-V2I



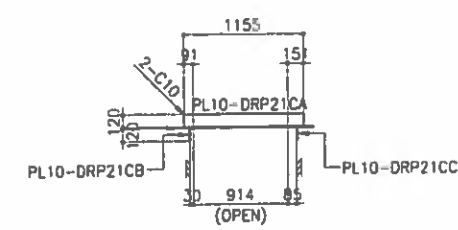
SECT. V2S



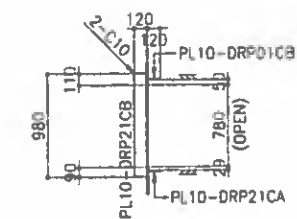
SECT. V2E



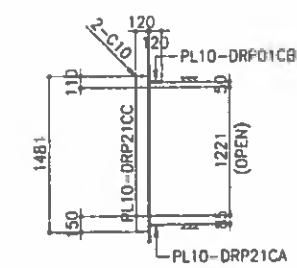
SECT. C



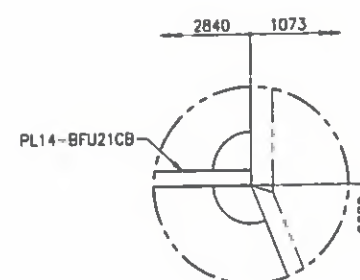
SECT. D



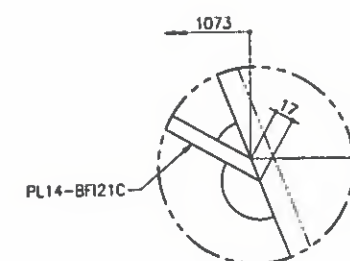
SECT. E



SECT. F



DET.#G



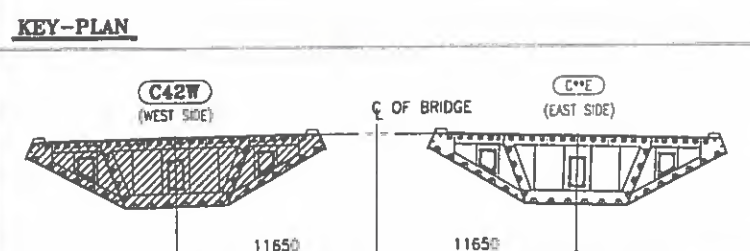
DET.#H

MARK	REF. DWG. NO.
USU1	SD-STO-001
USL1, USL2	SD-STO-001
ISU1	SD-STO-002
TSU1	SD-STO-003

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R= 35, C= 15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

(on hold)

A	2016.02.25	FOR APPROVAL	HJIPARK	S.S. SONG	S.M. LEE
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

SECTION DETAIL "C42W" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25



HYUNDAI
Engineering & Construction

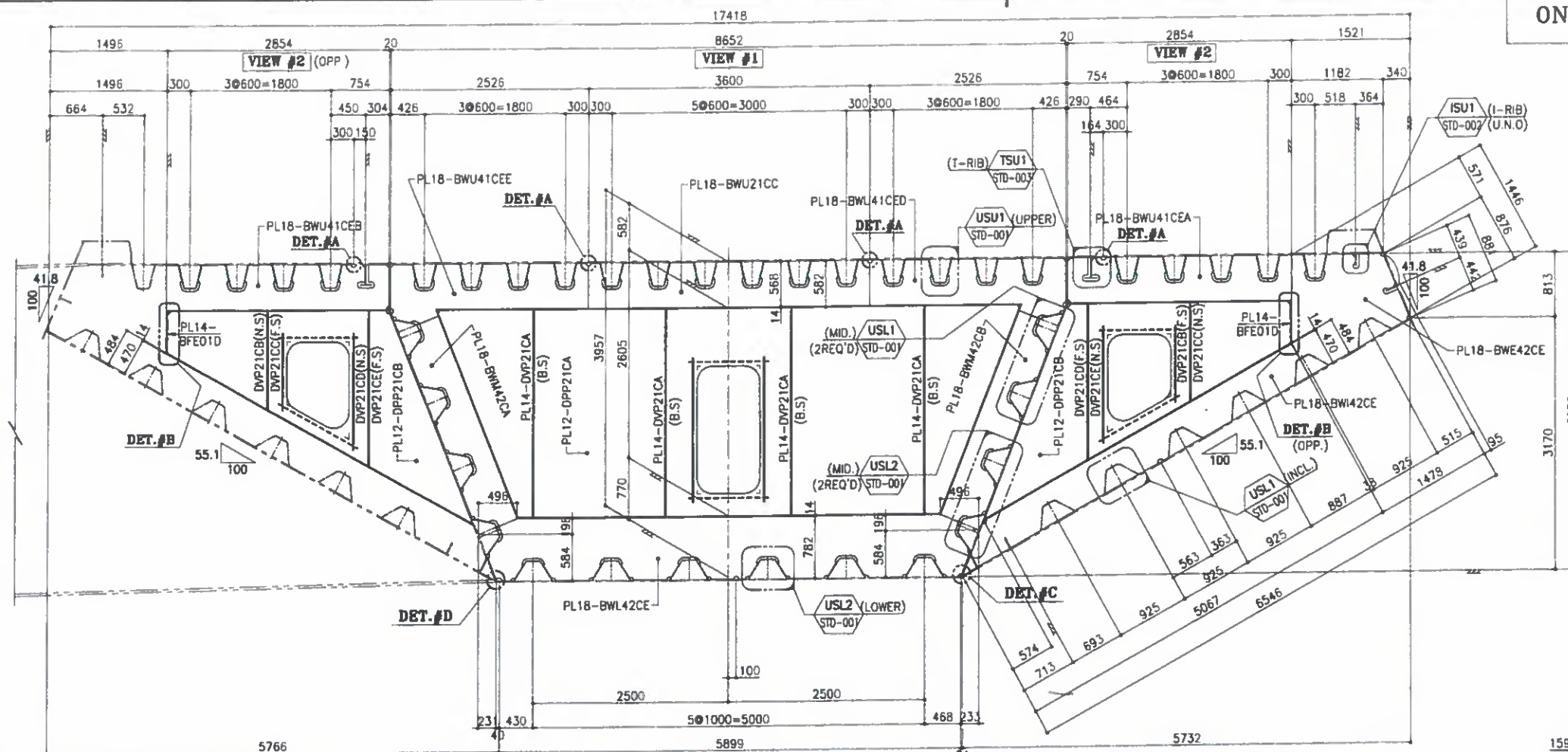


Combined Group
Contracting Company

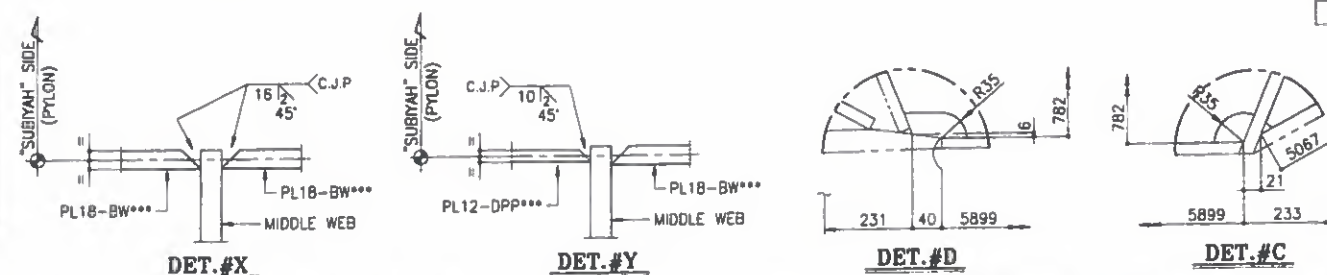
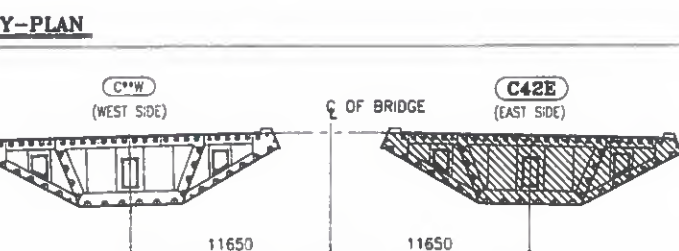
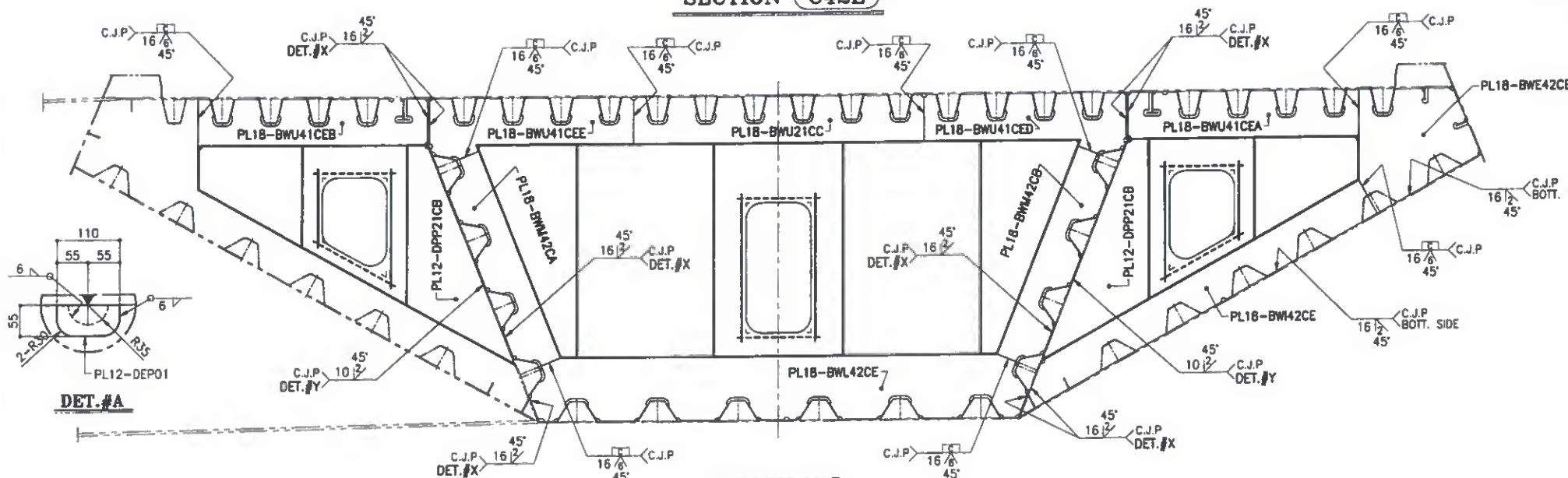
DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-409	



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C42E	<D\APHRAGM>	-	ONE			
BWU41CEA	PL 18*568	2854	1	229	A709M Gr.345	
BWU41CEB	PL 18*568	2854	1	229	A709M Gr.345	
BWU21CC	PL 18*568	3600	1	289	A709M Gr.345	
BWU41CED	PL 18*852	2526	1	304	A709M Gr.345	
BWU41CEE	PL 18*852	2526	1	304	A709M Gr.345	
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345	
BFU21CB	PL 14*318	2854	2	199	A709M Gr.345	
BWL42CE	PL 18*782	6403	1	708	A709M Gr.345	
BFL21C	PL 14*318	5423	1	190	A709M Gr.345	
BWI42CE	PL 18*470	5067	1	337	A709M Gr.345	
BFI21C	PL 14*318	4501	2	315	A709M Gr.345	
BWE42CE	PL 18*1446	1573	1	321	A709M Gr.345	
BFE01D	PL 14*318	517	1	18	A709M Gr.345	
BWM42CA	PL 18*534	2744	1	207	A709M Gr.345	
BWM42CB	PL 18*534	2744	1	207	A709M Gr.345	
BFW21C	PL 14*318	2806	2	196	A709M Gr.345	
DPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345	
DVP21CA	PL 14*150	2605	8	344	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DPP21CB	PL 12*2682	3913	2	1977	A709M Gr.345	
DVP21CB	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CC	PL 14*150	1238	2	41	A709M Gr.345	
DVP21CD	PL 14*150	1955	2	64	A709M Gr.345	
DVP21CE	PL 14*150	1955	2	64	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DRP21CA	PL 10*120	1155	2	22	A709M Gr.345	
DRP21CB	PL 10*120	980	2	18	A709M Gr.345	
DRP21CC	PL 10*120	1481	2	28	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
		S.TOTAL =		8824		



SECTION C42E



NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= .35 , ϕ .15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

■ **REF. DRAWING**

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE 

on hold

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

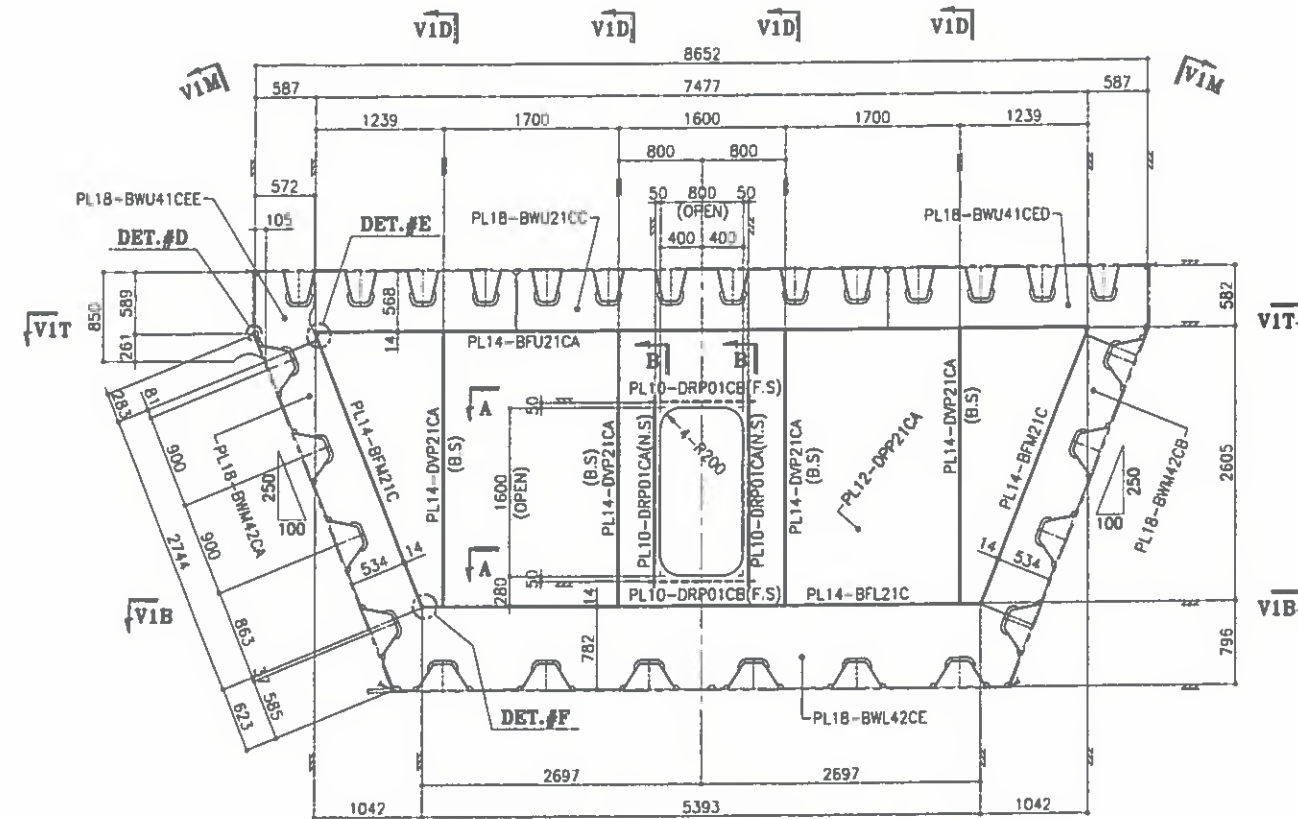
SECTION DETAIL "C42E" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHOI
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25
CONTRACTOR				

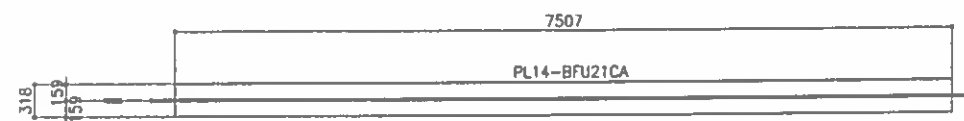
 	
DRAWING NO.	REV.
RA140-22-BRG-SD-SEC-410	A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

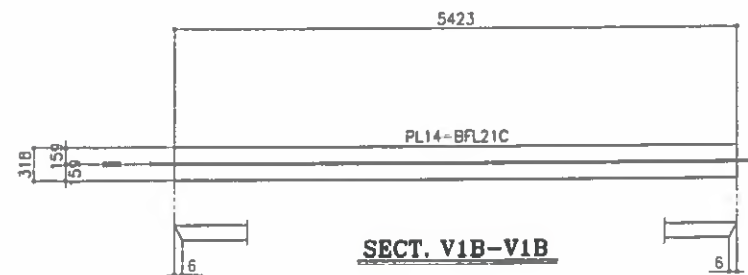
ON SCALE



VIEW #1

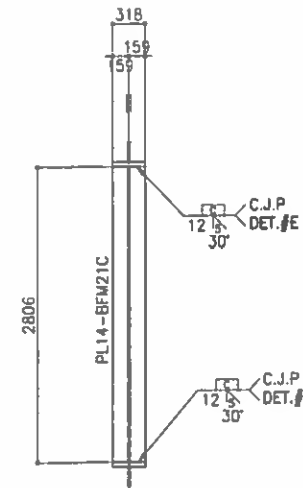
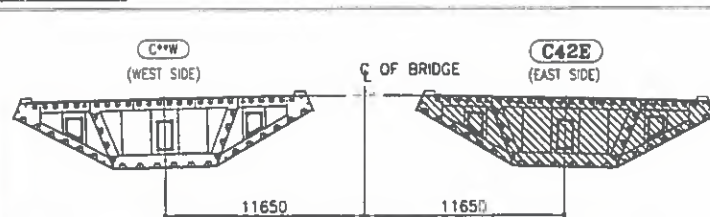


SECT. V1T-V1T

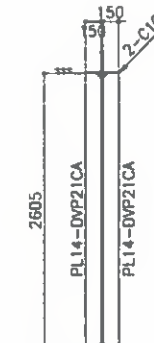


SECT. V1B-V1B

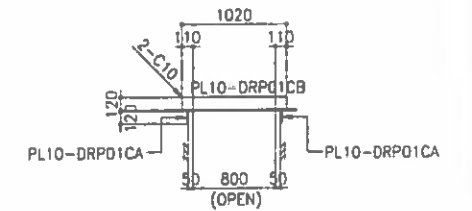
KEY-PLAN



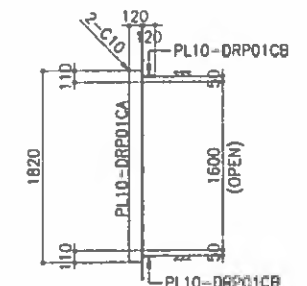
SECT. V1M



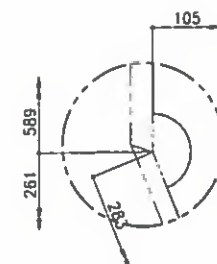
SECT. V1D



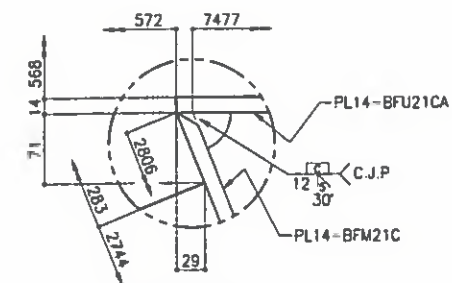
SECT. A



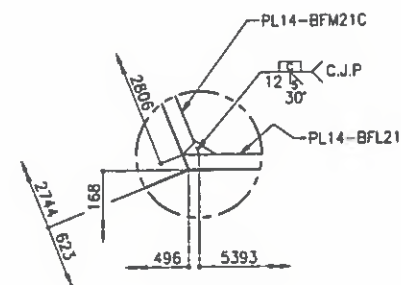
SECT. B



DET. #D



DET. #E



DET. #F

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R= 35, O= 15 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{4}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. Lee

On hold

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C42E" (2)

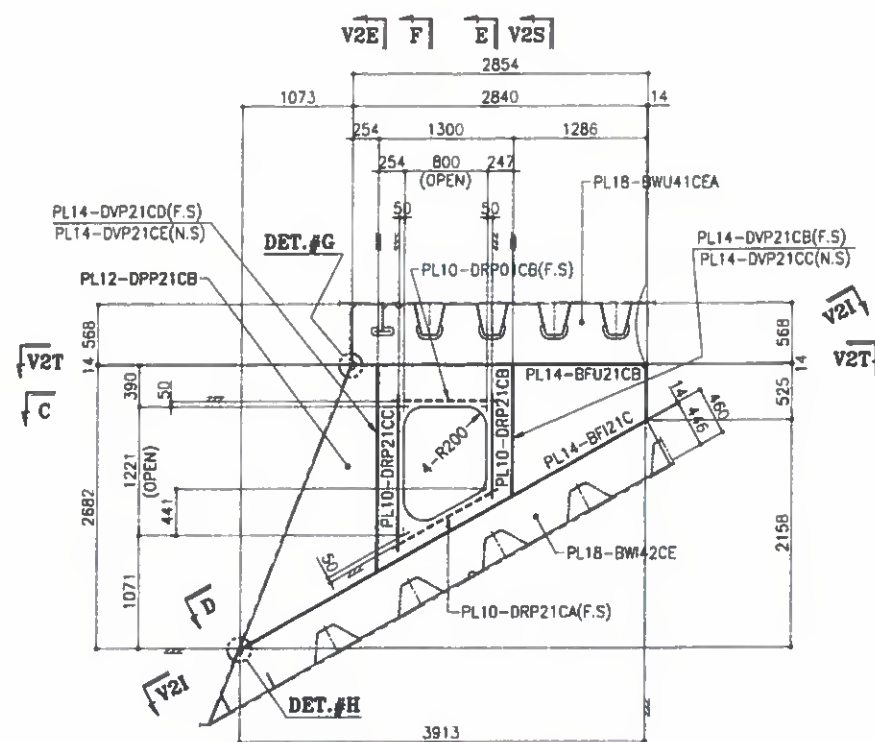
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHON	S.S.SONH	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

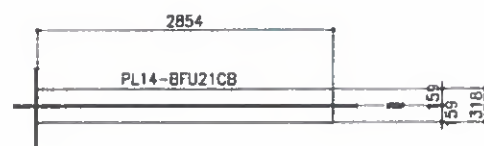
DRAWING NO.
RA140-22-BRG-SD-SEC-411

REV.
A

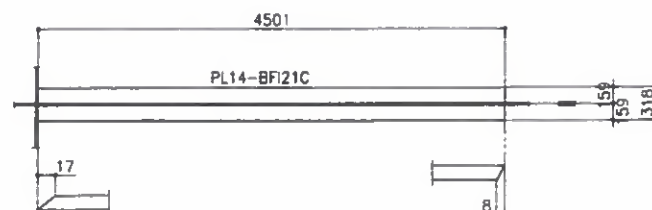
ON SCALE



VIEW #2

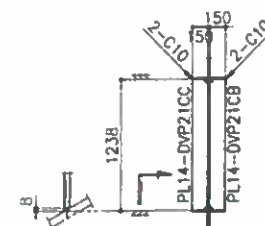
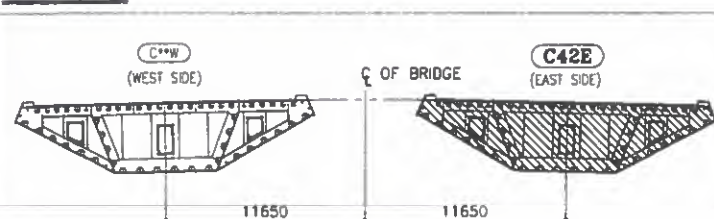


SECT. V2T-V2T

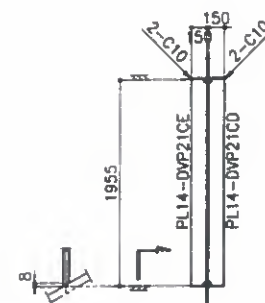


SECT. V2I-V2I

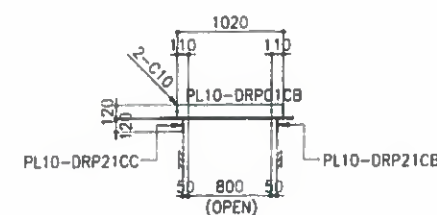
KEY-PLAN



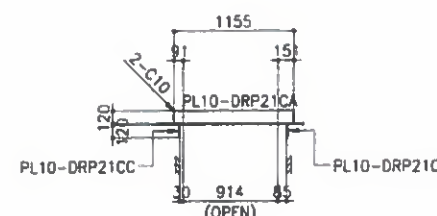
SECT. V2S



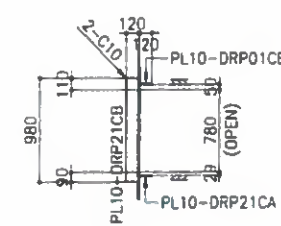
SECT. V2E



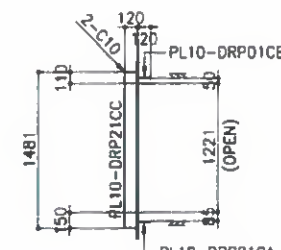
SECT. C



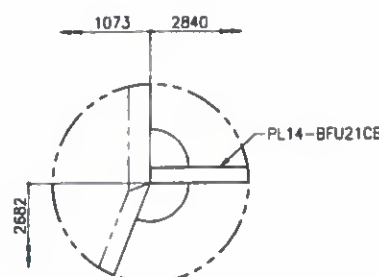
SECT. D



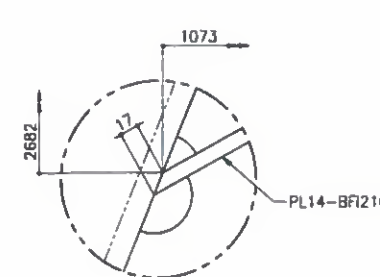
SECT. E



SECT. F



DET. #G



DET. #H

REF. DRAWING

MARK	REF. DWG. NO.
USU1	SD-STD-001
USL1, USL2	SD-STD-001
ISU1	SD-STD-002
TSU1	SD-STD-003

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLIP R=30, > 15 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

On hold

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C42E" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-SEC-412

REV.
A

(Provide approved reference)

ON SCALE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
C51	<DIAPHRAGM>	ONE				
BWU51CA	PL 65*582	4259	1	1265	A709M Gr.345	
BWU51CB	PL 65*582	4259	1	1265	A709M Gr.345	
BWU51CC	PL 65*843	8612	1	3704	A709M Gr.345	
CHST51A	PL 20*300	337	25	397	A709M Gr.345	
CHST51B	PL 20*300	274	2	26	A709M Gr.345	
CHSU51A	PL 20*300	300	25	353	A709M Gr.345	
CHSU51B	PL 20*300	256	2	24	A709M Gr.345	
BFU21CA	PL 14*318	7507	1	262	A709M Gr.345	
BWL51C	PL 65*756	6359	1	2453	A709M Gr.345	
CHSL51A	PL 25*300	200	15	177	A709M Gr.345	
BFL21C	PL 14*318	5423	1	190	A709M Gr.345	
BW51CA	PL 18*991	4024	1	560	A709M Gr.345	
BW51CB	PL 18*991	4024	1	560	A709M Gr.345	
BWE51CA	PL 18*712	1047	1	105	A709M Gr.345	
BWE51CB	PL 18*712	1047	1	105	A709M Gr.345	
BWU51CA	PL 65*510	2744	1	714	A709M Gr.345	
BWU51CB	PL 65*510	2744	1	714	A709M Gr.345	
CHSM51A	PL 20*300	200	10	94	A709M Gr.345	
CHSM51B	PL 20*300	181	1	9	A709M Gr.345	
CHSM51C	PL 20*300	63	1	3	A709M Gr.345	
CHSM51D	PL 20*300	181	1	9	A709M Gr.345	
CHSM51E	PL 20*300	63	1	3	A709M Gr.345	
BFM21C	PL 14*318	2806	2	196	A709M Gr.345	
DPP21CA	PL 12*2605	7477	1	1835	A709M Gr.345	
DVP21CA	PL 14*150	2605	8	344	A709M Gr.345	
DRP01CA	PL 10*120	1820	2	34	A709M Gr.345	
DRP01CB	PL 10*120	1020	2	19	A709M Gr.345	
DEP01	PL 12*55	110	4	2	A709M Gr.345	
S.TOTAL=				15422		

PT-BAR

56

HOLD

HL'S (27REQ'D)

PT-BAR 56

HOLD

SECTION C51

* Provide approved Reference

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLUP R= 35, O= 18 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

REF. DRAWING

MARK	REF. DWG. NO.
ISU1	SD-STD-002

FOR APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE (563)
STEEL DECK Part A
SECTION DETAIL "C51" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

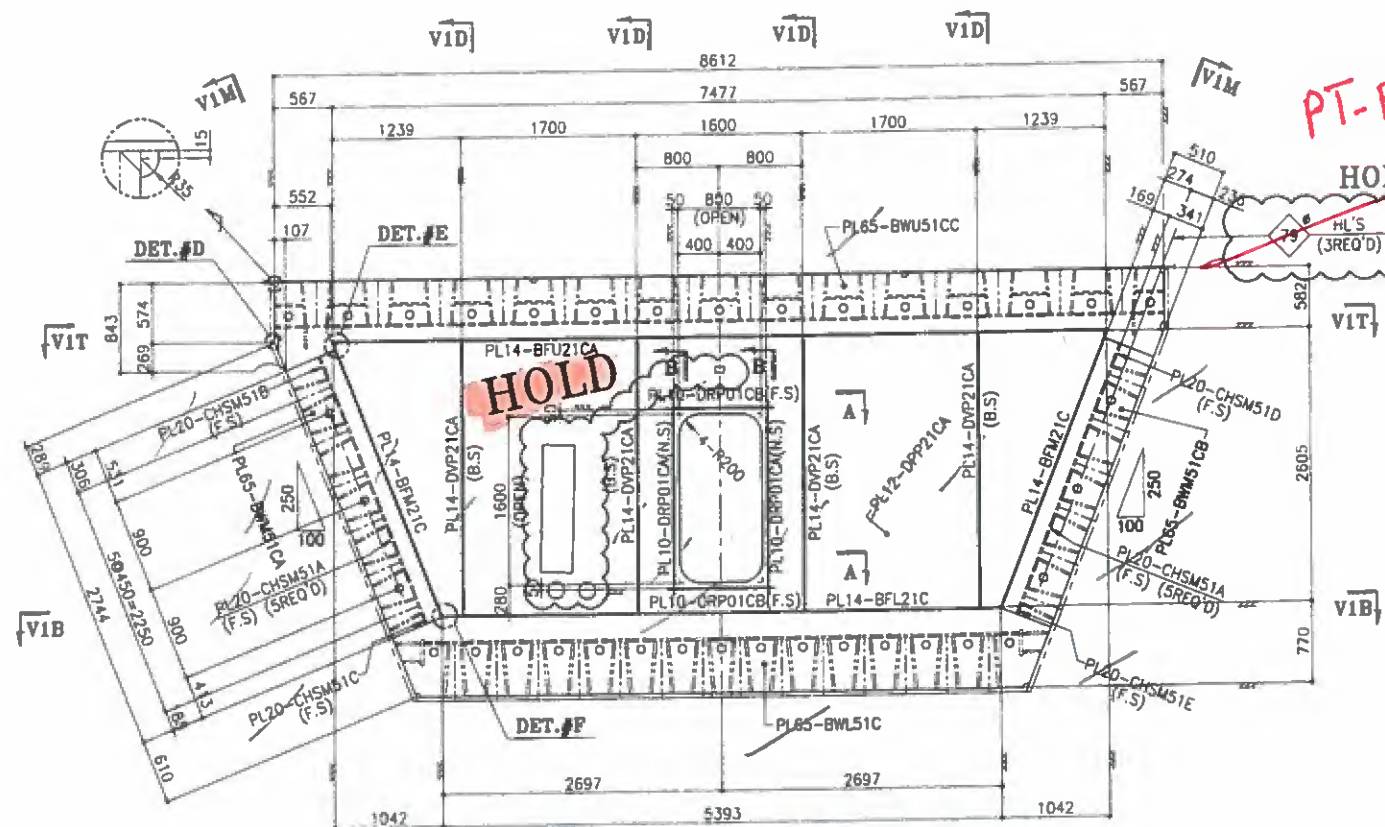
CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO
RA140-22-BRG-SD-SEC-501
REV. A

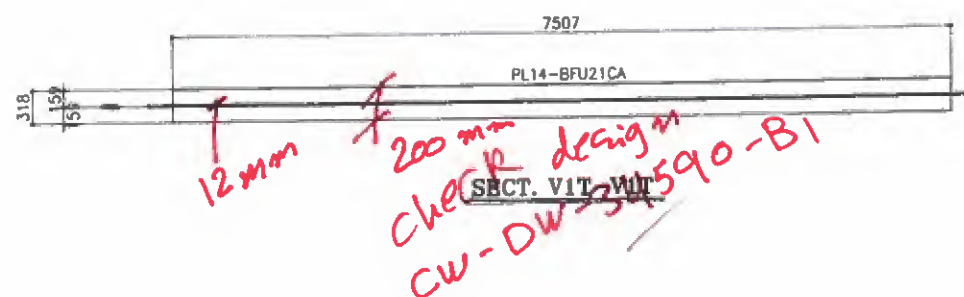
Provide approved Reference

Provide approved Reference and WPS/PQR.

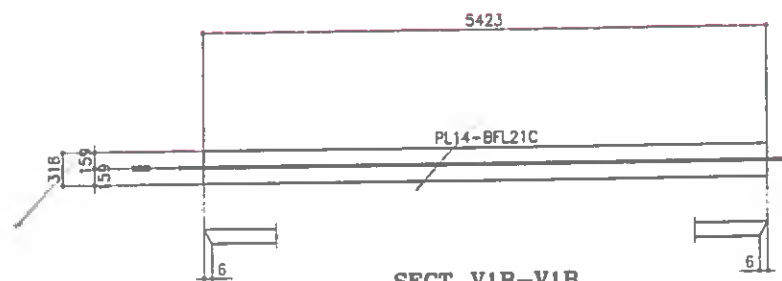
ON SCALE



VIEW #1



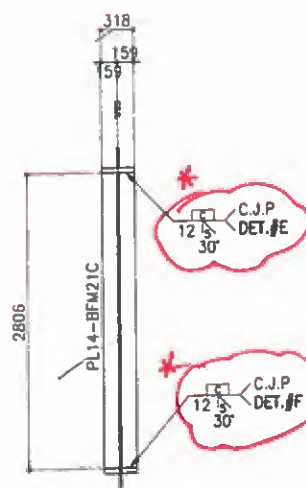
SECTION VIT-VI



SECTION VIB-VIB

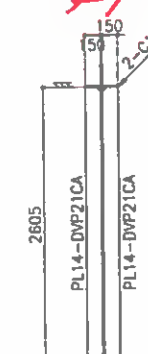
PT-BAR 56

HOLD

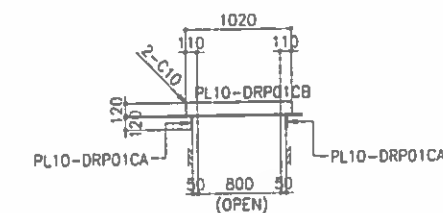


SECTION VIM

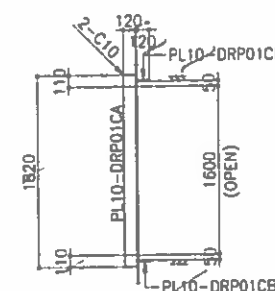
318



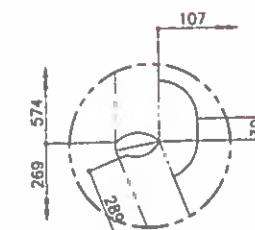
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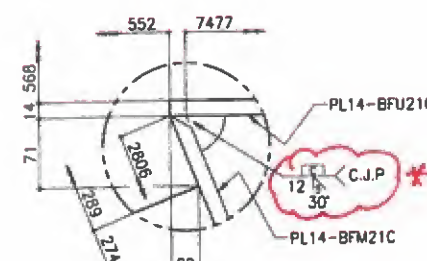
SECTION A



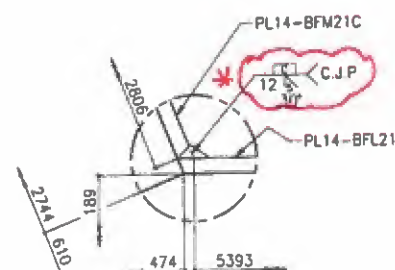
SECTION B



DETAIL #D



DETAIL #E



DETAIL #F

* Provide approved reference

REF. DRAWING

MARK	REF. DWG. NO.
ISU1	SD-STD-002

NOTES

1. MATERIALS SEE S.O.B. UNLESS NOTED
2. SCALLOP R=35, O=15 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	2016.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S.M. KHORRAM

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C51" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 35	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHORRAM

CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-502

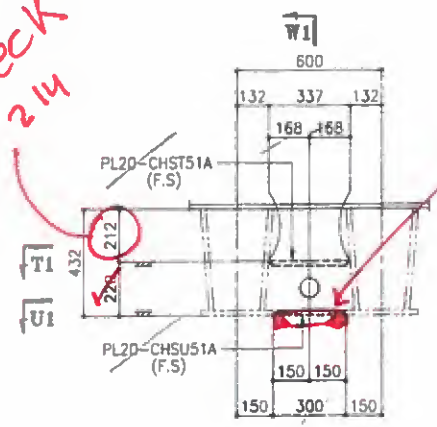
REV.
A

ON SCALE

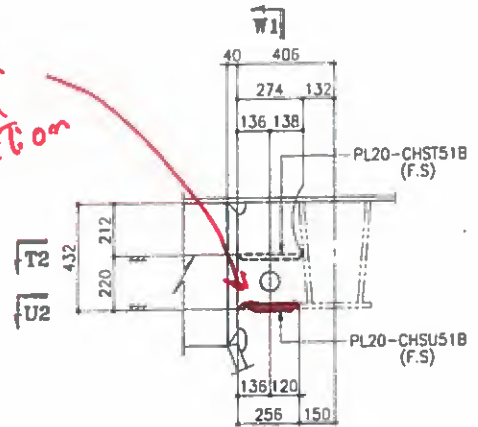
check
214

check
weld
direction

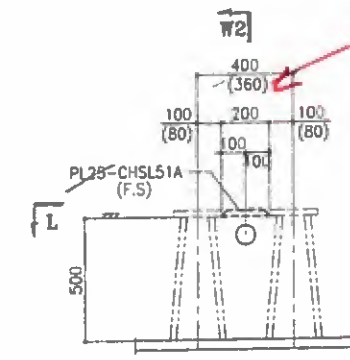
check
380



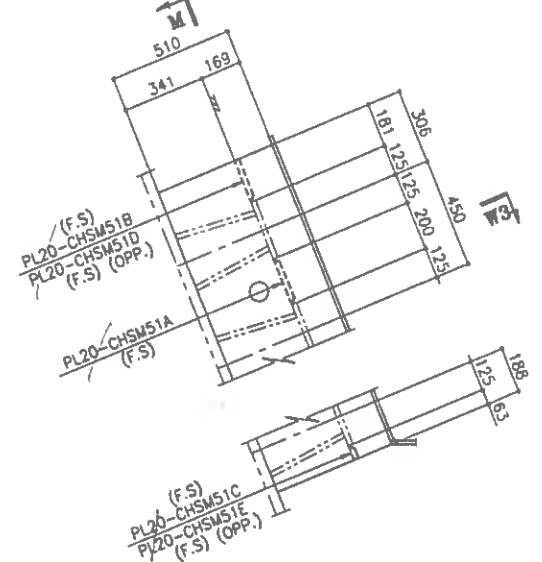
"PL20-CHST51A" DETAIL
(25REQ'D)
"PL20-CHSU51A" DETAIL
(25REQ'D)



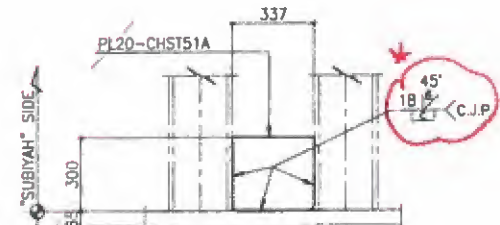
"PL20-CHST51B" DETAIL
(2REQ'D)
"PL20-CHSU51B" DETAIL
(2REQ'D)



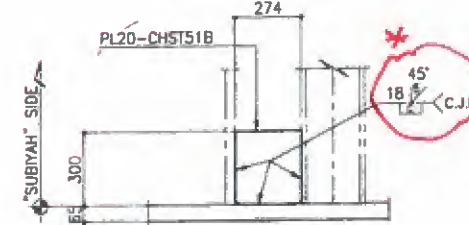
"PL25-CHSL51A" DETAIL
(15REQ'D)



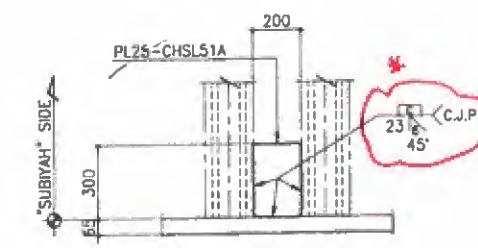
"PL20-CHSM51A" DETAIL
(10REQ'D)
"PL20-CHSM51B" DETAIL
"PL20-CHSM51C" DETAIL
"PL20-CHSM51D" DETAIL
(OPP.)
"PL20-CHSM51E" DETAIL
(OPP.)



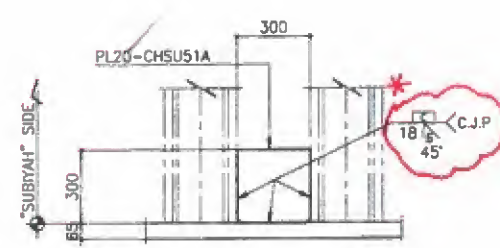
SECT. T1



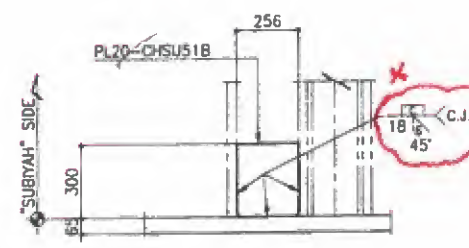
SECT. T2



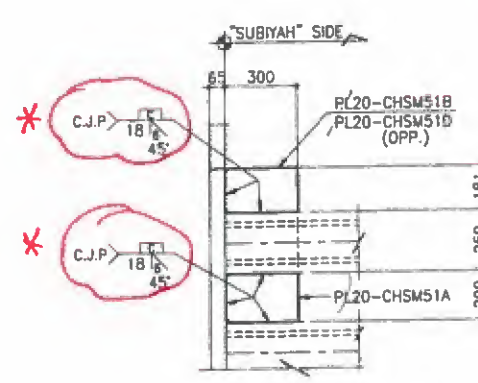
SECT. L



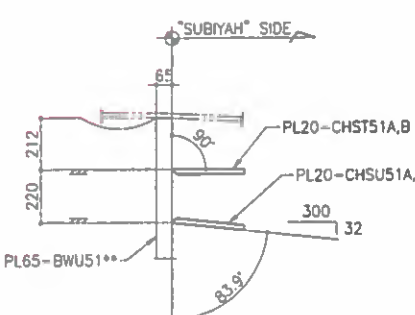
SECT. U1



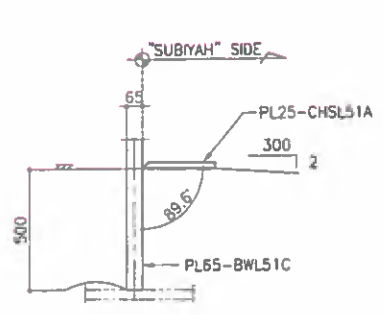
SECT. U2



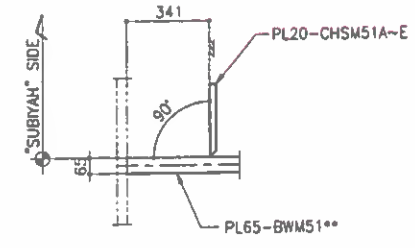
SECT. M



SECT. W1



SECT. W2



SECT. W3

* Provide reference

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SONG	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C51" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 15	H.J.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

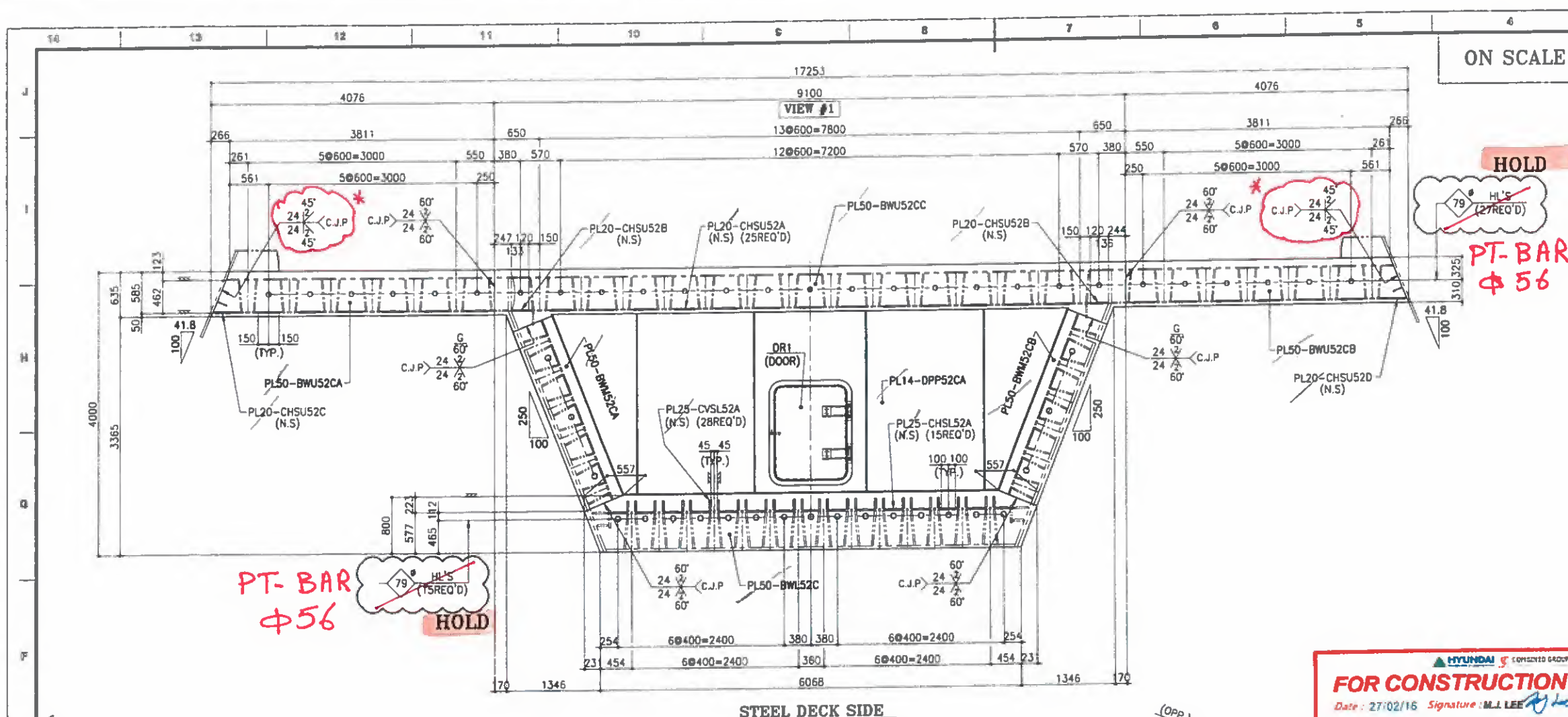
CONTRACTOR
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-SEC-503

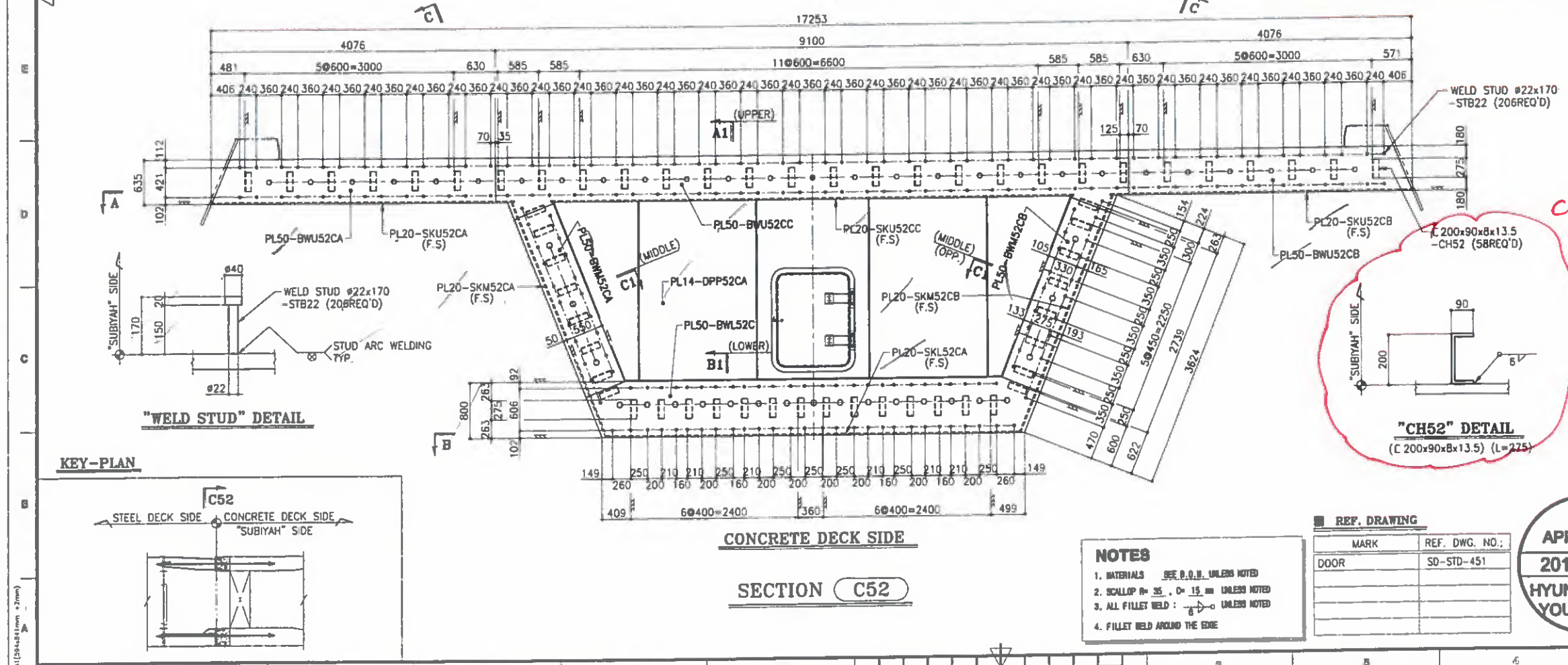
MARK	REF. DWG. NO.
ISU1	SD-STD-002

NOTES
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 25 , Ø 15 mm UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK
C52	<DIAPHRAGM>	ONE			
BWU52CA	PL 50*635	4076	1	1016	A709M Gr.345
BWU52CB	PL 50*635	4076	1	1016	A709M Gr.345
BWU52CC	PL 50*679	9100	1	3140	A709M Gr.345
CHSU52A	PL 20*300	700	25	824	A709M Gr.345
CHSU52B	PL 20*253	700	2	56	A709M Gr.345
CHSU52C	PL 20*347	700	1	38	A709M Gr.345
CHSU52D	PL 20*347	700	1	38	A709M Gr.345
BWL52C	PL 50*800	6530	1	2050	A709M Gr.345
CHSL52A	PL 25*300	200	15	177	A709M Gr.345
CYSL52A	PL 25*150	500	28	412	A709M Gr.345
BFL52C	PL 14*150	5426	1	89	A709M Gr.345
BWM52CA	PL 50*600	2739	1	645	A709M Gr.345
BWM52CB	PL 50*600	2739	1	645	A709M Gr.345
CHSM52A	PL 20*300	200	10	94	A709M Gr.345
CHSM52B	PL 20*300	181	1	9	A709M Gr.345
CHSM52C	PL 20*300	58	1	3	A709M Gr.345
CHSM52D	PL 20*300	181	1	9	A709M Gr.345
CHSM52E	PL 20*300	58	1	3	A709M Gr.345
BFM52CA	PL 14*150	2753	1	45	A709M Gr.345
BFM52CB	PL 14*150	2753	1	45	A709M Gr.345
DPP52CA	PL 14*2551	7437	1	2085	A709M Gr.345
DVP52C	PL 14*150	2551	8	336	A709M Gr.345
SKU52CA	PL 20*600	4378	1	412	A709M Gr.345
SKU52CB	PL 20*600	4378	1	412	A709M Gr.345
SKU52CC	PL 20*600	7527	1	709	A709M Gr.345
SKL52CA	PL 20*600	5917	1	557	A709M Gr.345
SKM52CA	PL 20*600	3632	1	342	A709M Gr.345
SKM52CB	PL 20*600	3632	1	342	A709M Gr.345
STB22	SB D22	170	308	180	ASTM A36
CH52	c 200*90*8*13.5	275	58	483	SJ55J2
<DOOR-DR1>					
ADP01	PL 10*1020	1320	1	108	A709M Gr.345
ADP02	PL 10*1180	1480	1	137	A709M Gr.345
ADP03	PL 10*120	160	4	6	A709M Gr.345
ADP04	PL 12*70	400	4	11	A709M Gr.345
ADP05	PL 10*25	140	1	7	A709M Gr.345
ADP06	L 100*100*10	60	4	4	A500 Gr.345
ADP07	PIPE D34*2.3	116	2	2	A500 Gr.345
ADP08	R.B D16	116	2	2	A500 Gr.345
ADP09	R.B D16	252	1	2	A500 Gr.345
ADP10	R.B D16	200	2	2	A500 Gr.345
ADP11	PL 4.5*40	40	2	2	A709M Gr.345
ADP12	CB M12	40	1	1	A500 Gr.345
ADP15	M20*2N*2W	225	2	2	A325M Type1
S.TOTAL=				16478	



REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.
A	2016.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S.M. KHON

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

SECTION DETAIL "C52" (1)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1:35	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON

DATE ISSUED

2016.02.25

2016.02.25

2016.02.25

2016.02.25

2016.02.25

CONTRACTOR

HYUNDAI E&S

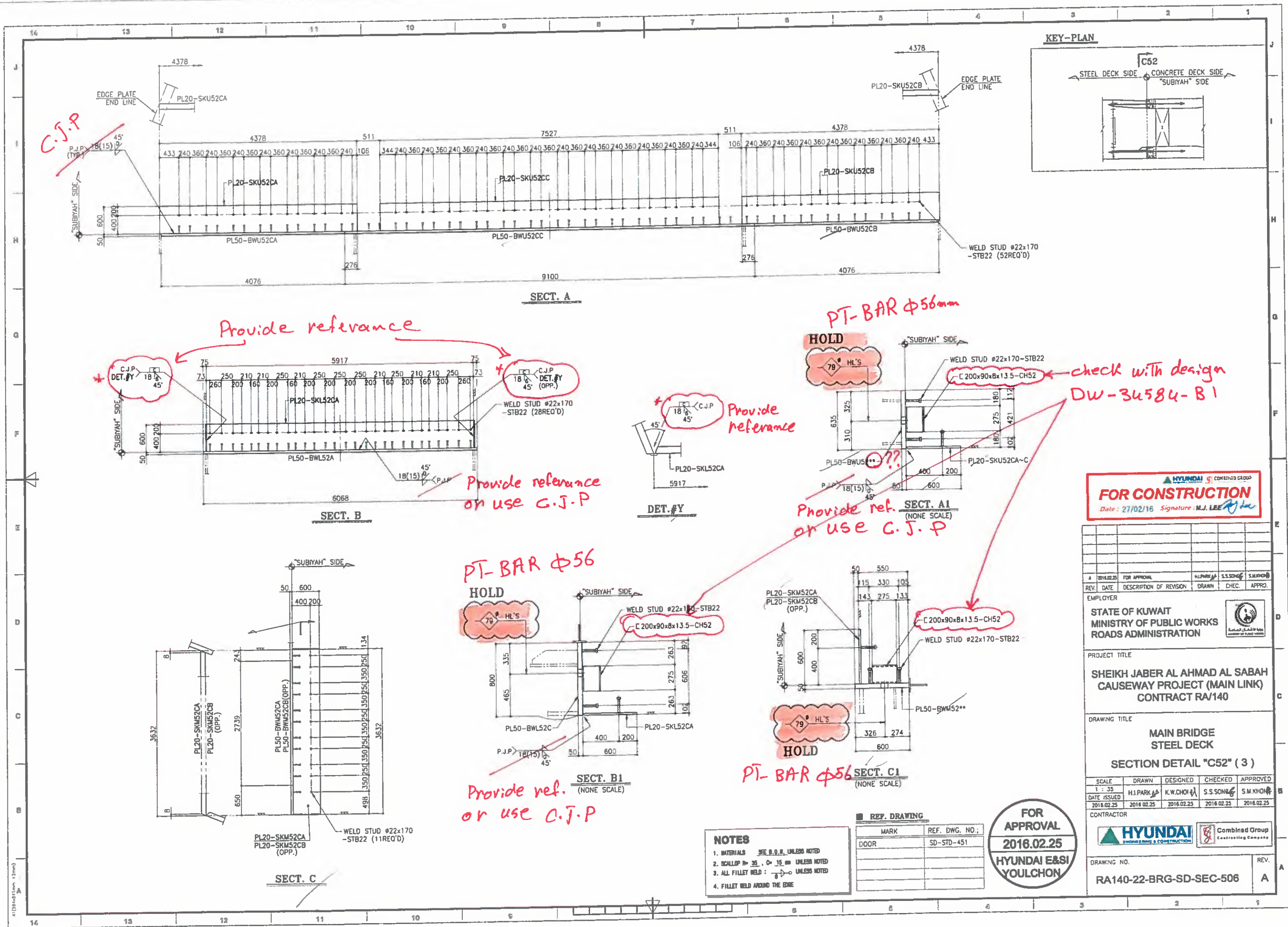
Combined Group

DRAWING NO.

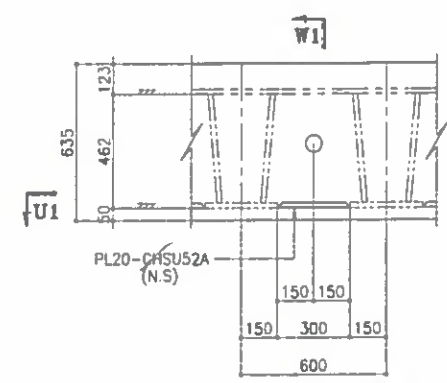
RA140-22-BRG-SD-SEC-504

REV.

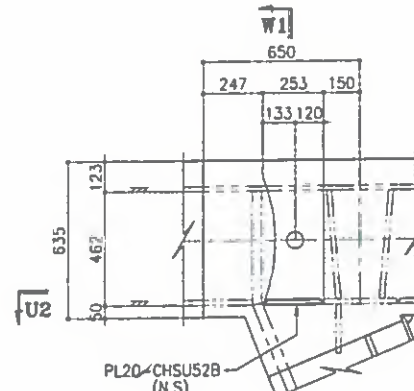
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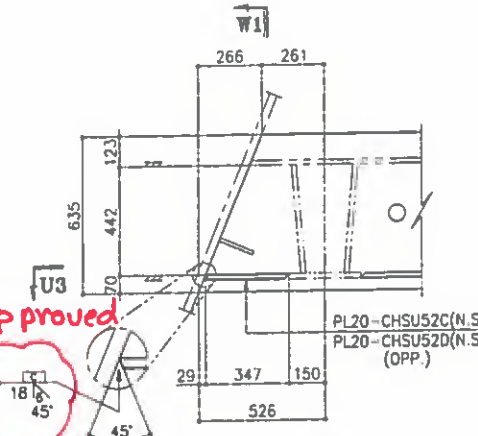
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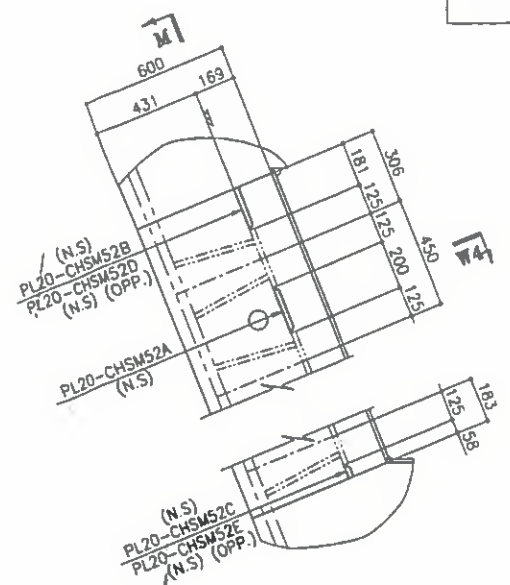
"PL20-CHSU52A" DETAIL
(25REQ'D)



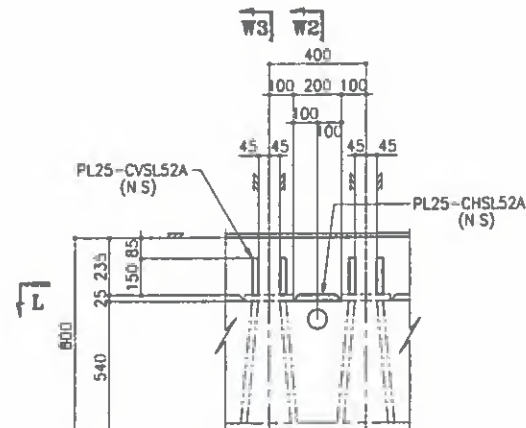
"PL20-CHSU52B" DETAIL
(2REQ'D)



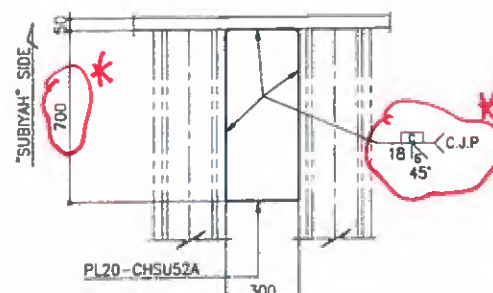
"PL20-CHSU52C" DETAIL
"PL20-CHSU52D" DETAIL
(OPP.)



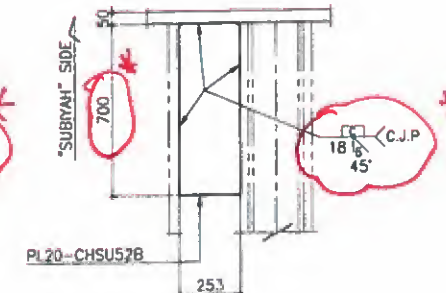
"PL20-CHSM52A" DETAIL
(10REQ'D)
"PL20-CHSM52B" DETAIL
"PL20-CHSM52C" DETAIL
"PL20-CHSM52D" DETAIL
(OPP.)
"PL20-CHSM52E" DETAIL
(OPP.)



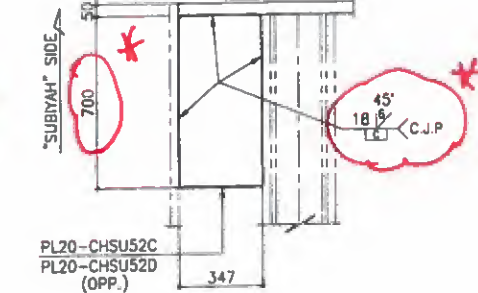
"PL25-CHSL52A" DETAIL
(15REQ'D)
"PL25-CVSL52A" DETAIL
(28REQ'D)



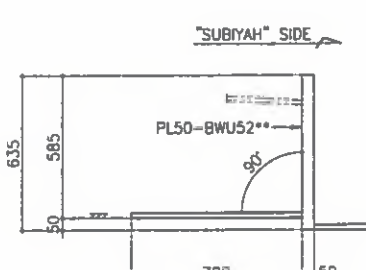
SECT. U1



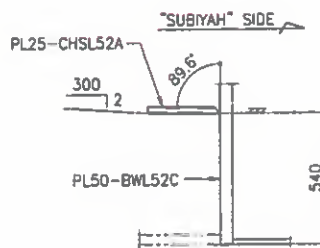
SECT. U2



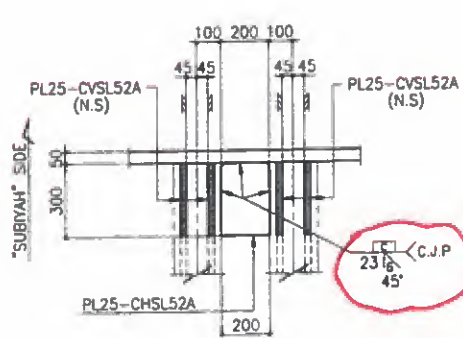
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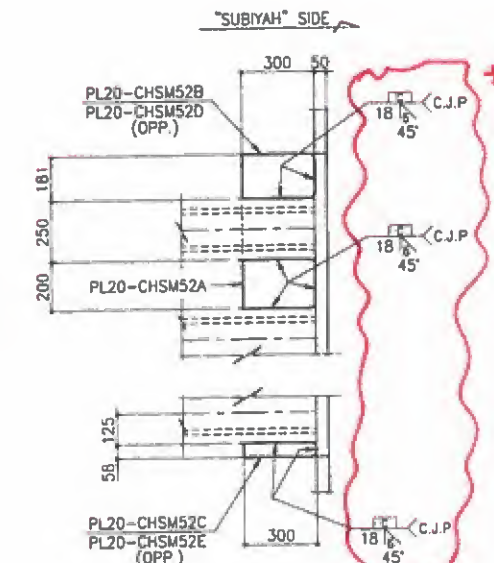
SECT. W1



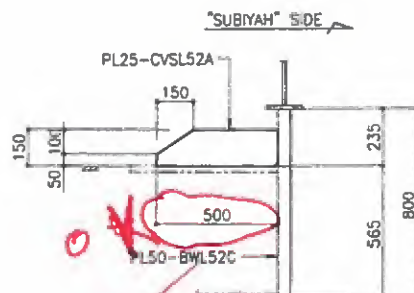
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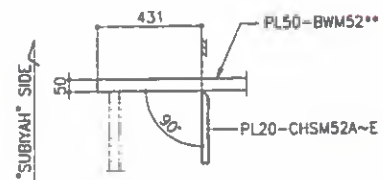
SECT. L



SECT. M



SECT. W3



SECT. W4

REF. DRAWING	
MARK	REF. DWG. NO.
DOOR	SD-STD-451

- NOTES**
1. MATERIALS SEE B.O.I. UNLESS NOTED
 2. SCALLOP R= 35, C= 15 UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
SECTION DETAIL "C52" (4)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
1 : 15	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group
Contracting Company

DRAWING NO.
RA140-22-BRG-SD-SEC-507

REV.
A

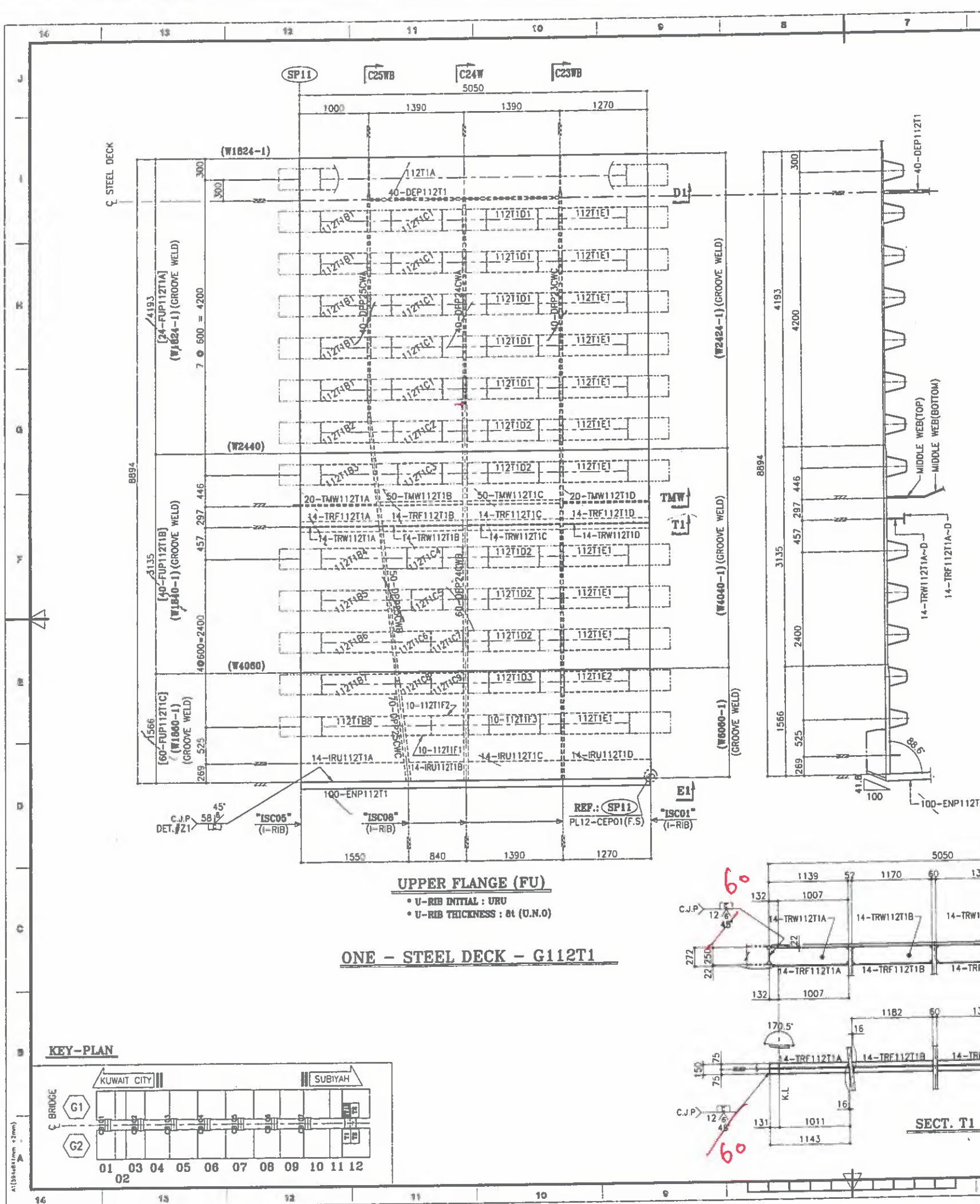
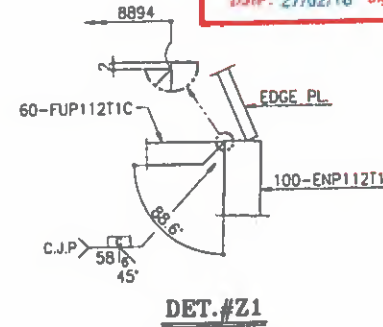


TABLE [U-RIB]

MARK	THK.	QTY	TYPE	CONNECTION	
				LEFT	RIGHT
URU112T1A	8	1	USU1	USC07	USC01
URU112T1B1	8	5	USU2	USC02	USC60
URU112T1B2	8	1	USU2	USC02	USC61
URU112T1B3	8	1	USU3	USC03	USC62
URU112T1B4	8	1	USU3	USC03	USC62
URU112T1B5	8	1	USU3	USC03	USC62
URU112T1B6	8	1	USU3	USC03	USC62
URU112T1B7	8	1	USU4	USC05	USC64
URU112T1B8	8	1	USU5	USC04	USC66
URU112T1C1	8	5	USU1	USC08	USC08
URU112T1C2	8	1	USU1	USC09	USC08
URU112T1C3	8	1	USU1	USC09	USC08
URU112T1C4	8	1	USU1	USC09	USC08
URU112T1C5	8	1	USU1	USC09	USC08
URU112T1C6	8	1	USU1	USC63	USC67
URU112T1C7	8	1	USU1	USC67	USC51
URU112T1C8	8	1	USU6	USC65	USC68
URU112T1C9	8	1	USU6	USC68	USC69
URU112T1D1	8	5	USU1	USC08	USC08
URU112T1D2	8	5	USU1	USC08	USC08
URU112T1D3	8	1	USU6	USC10	USC11
URU112T1E1	8	11	USU1	USC51	USC01
URU112T1E2	8	1	USU6	USC69	USC13
URU112T1F1	10	1	USU7	USC70	USC72
URU112T1F2	10	1	USU7	USC72	USC71
URU112T1F3	10	1	USU7	USC12	USC12

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=35, C=15 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

BILL OF MATERIALS					
MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK
G112T1	<STEEL DECK>	-	ONE		
FUP112T1A	PL 24*4193	5051	1	3990	A709M Gr.345
FUP112T1B	PL 40*3135	5051	1	4972	A709M Gr.345
FUP112T1C	PL 60*1566	5051	1	3726	A709M Gr.345
URU112T1A	PL 8*744	4438	1	207	A709M Gr.345
URU112T1B1	PL 8*732	668	5	154	A709M Gr.345
URU112T1B2	PL 8*732	707	1	33	A709M Gr.345
URU112T1B3	PL 8*699	770	1	34	A709M Gr.345
URU112T1B4	PL 8*699	897	1	39	A709M Gr.345
URU112T1B5	PL 8*699	960	1	42	A709M Gr.345
URU112T1B6	PL 8*699	1024	1	45	A709M Gr.345
URU112T1B7	PL 8*672	1077	1	45	A709M Gr.345
URU112T1B8	PL 8*658	1140	1	47	A709M Gr.345
URU112T1C1	PL 8*744	738	5	172	A709M Gr.345
URU112T1C2	PL 8*744	700	1	33	A709M Gr.345
URU112T1C3	PL 8*744	837	1	30	A709M Gr.345
URU112T1C4	PL 8*744	510	1	24	A709M Gr.345
URU112T1C5	PL 8*744	447	1	21	A709M Gr.345
URU112T1C6	PL 8*744	535	1	25	A709M Gr.345
URU112T1C7	PL 8*744	464	1	22	A709M Gr.345
URU112T1C8	PL 8*726	472	1	22	A709M Gr.345
URU112T1C9	PL 8*726	464	1	21	A709M Gr.345
URU112T1D1	PL 8*744	738	5	172	A709M Gr.345
URU112T1D2	PL 8*744	728	5	170	A709M Gr.345
URU112T1D3	PL 8*726	728	1	33	A709M Gr.345
URU112T1E1	PL 8*744	938	11	482	A709M Gr.345
URU112T1E2	PL 8*726	938	1	43	A709M Gr.345
URU112T1F1	PL 10*654	397	1	20	A709M Gr.345
URU112T1F2	PL 10*654	464	1	24	A709M Gr.345
URU112T1F3	PL 10*654	728	1	37	A709M Gr.345
URU112T1A	PL 15*192	1486	1	34	A709M Gr.345
URU112T1B	PL 15*150	802	1	14	A709M Gr.345
URU112T1C	PL 15*150	1340	1	24	A709M Gr.345
URU112T1D	PL 15*150	1250	1	22	A709M Gr.345
TRW112T1A	PL 14*272	1139	1	34	A709M Gr.345
TRW112T1B	PL 14*250	1170	1	32	A709M Gr.345
TRW112T1C	PL 14*250	1340	1	37	A709M Gr.345
TRW112T1D	PL 14*250	1250	1	34	A709M Gr.345
TRF112T1A	PL 14*150	1143	1	19	A709M Gr.345
TRF112T1B	PL 14*150	1182	1	19	A709M Gr.345
TRF112T1C	PL 14*150	1340	1	22	A709M Gr.345
TRF112T1D	PL 14*150	1250	1	21	A709M Gr.345
CEP01	PL 12*55	110	1	1	A709M Gr.345
FUP112T1A	PL 40*3080	5251	1	5078	A709M Gr.345
FUP112T1B	PL 50*4071	5262	1	8408	A709M Gr.345
URL112T1A	PL 6*756	868	3	93	A709M Gr.345
URL112T1B	PL 6*756	738	6	158	A709M Gr.345
URL112T1C	PL 6*756	938	3	100	A709M Gr.345
BRW112T1A	PL 14*200	4287	1	94	A709M Gr.345
BRF112T1A	PL 14*120	4187	1	55	A709M Gr.345
CEP01	PL 12*55	110	1	1	A709M Gr.345

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (1)

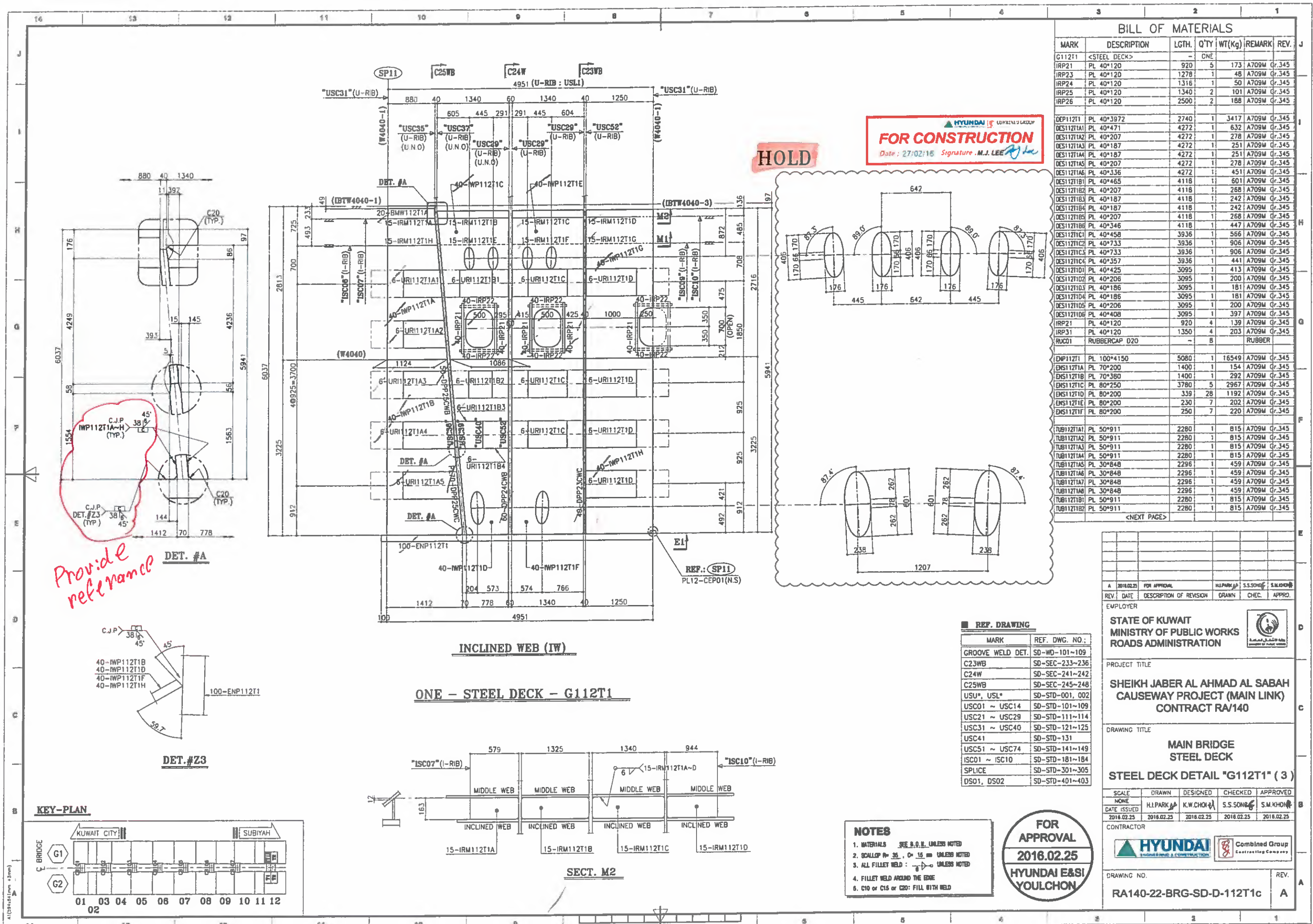
SCALE
NONE

DATE ISSUED
2016.02.25

CONTRACTOR
HYUNDAI E&SI
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-D-112T1a

REV.
A



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G112T1	<STEEL DECK>	-	ONE	-		
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP23	PL 40*120	1278	1	48	A709M Gr.345	
IRP24	PL 40*120	1316	1	50	A709M Gr.345	
IRP25	PL 40*120	1340	2	101	A709M Gr.345	
IRP26	PL 40*120	2500	2	188	A709M Gr.345	
DEP112T1	PL 40*3972	2740	1	3417	A709M Gr.345	
DES112T1A1	PL 40*471	4272	1	632	A709M Gr.345	
DES112T1A2	PL 40*207	4272	1	278	A709M Gr.345	
DES112T1A3	PL 40*187	4272	1	251	A709M Gr.345	
DES112T1A4	PL 40*187	4272	1	251	A709M Gr.345	
DES112T1A5	PL 40*207	4272	1	278	A709M Gr.345	
DES112T1A6	PL 40*336	4272	1	451	A709M Gr.345	
DES112T1B1	PL 40*465	4118	1	601	A709M Gr.345	
DES112T1B2	PL 40*207	4118	1	258	A709M Gr.345	
DES112T1B3	PL 40*187	4118	1	242	A709M Gr.345	
DES112T1B4	PL 40*187	4118	1	242	A709M Gr.345	
DES112T1B5	PL 40*207	4118	1	258	A709M Gr.345	
DES112T1B6	PL 40*346	4118	1	447	A709M Gr.345	
DES112T1C1	PL 40*458	3936	1	556	A709M Gr.345	
DES112T1C2	PL 40*733	3936	1	906	A709M Gr.345	
DES112T1C3	PL 40*733	3936	1	906	A709M Gr.345	
DES112T1C4	PL 40*357	3936	1	441	A709M Gr.345	
DES112T1D1	PL 40*425	3095	1	413	A709M Gr.345	
DES112T1D2	PL 40*206	3095	1	200	A709M Gr.345	
DES112T1D3	PL 40*186	3095	1	181	A709M Gr.345	
DES112T1D4	PL 40*186	3095	1	181	A709M Gr.345	
DES112T1D5	PL 40*206	3095	1	200	A709M Gr.345	
DES112T1D6	PL 40*408	3095	1	397	A709M Gr.345	
IRP21	PL 40*120	920	4	139	A709M Gr.345	
IRP31	PL 40*120	1350	4	203	A709M Gr.345	
RUC01	RUBBERCAP D20	-	8	-	RUBBER	
ENP112T1	PL 100*4150	5080	1	16549	A709M Gr.345	
ENS112T1A	PL 70*200	1400	1	154	A709M Gr.345	
ENS112T1B	PL 70*380	1400	1	292	A709M Gr.345	
ENS112T1C	PL 80*250	3780	5	2967	A709M Gr.345	
ENS112T1D	PL 80*200	339	28	1192	A709M Gr.345	
ENS112T1E	PL 80*200	230	7	202	A709M Gr.345	
ENS112T1F	PL 80*200	250	7	220	A709M Gr.345	
TUB112T1A1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1A2	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1A3	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1A4	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1A5	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1A6	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1A7	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1A8	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1B1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1B2	PL 50*911	2280	1	815	A709M Gr.345	

REF. DRAWING	
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

- NOTES**
1. MATERIALS SEE B.O.B. UNLESS NOTED
 2. SCALLOP R=35, Or 15 mm UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15 or C20: FILL WITH WELD

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

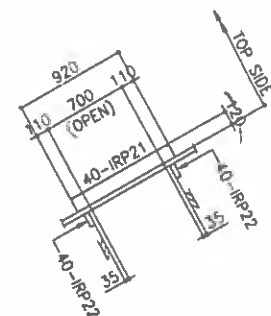
A 2016.02.25 FOR APPROVAL		H.I.PARK		S.S.SON		S.M.KHOI	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.		
EMPLOYER							
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION							
PROJECT TITLE							
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140							
DRAWING TITLE							
MAIN BRIDGE STEEL DECK STEEL DECK DETAIL "G112T1" (3)							
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED			
NONE	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHOI			
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25			
CONTRACTOR							
HYUNDAI E&S YOULCHON							
DRAWING NO.							
RA140-22-BRG-SD-D-112T1c							
REV.							
A							

DIAPH. IN SIDE

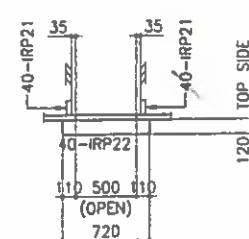
[G112T2] JOINT SIDE

*"40-IRP22" Weld sequence :
"G112T2" and After completion of assembly

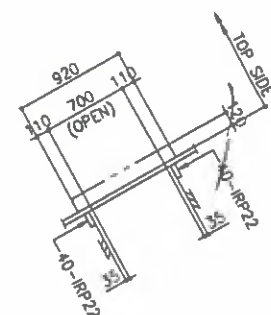
"ACCESS HOLE" DETAIL



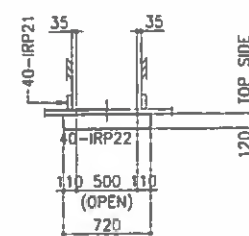
SECT. A1



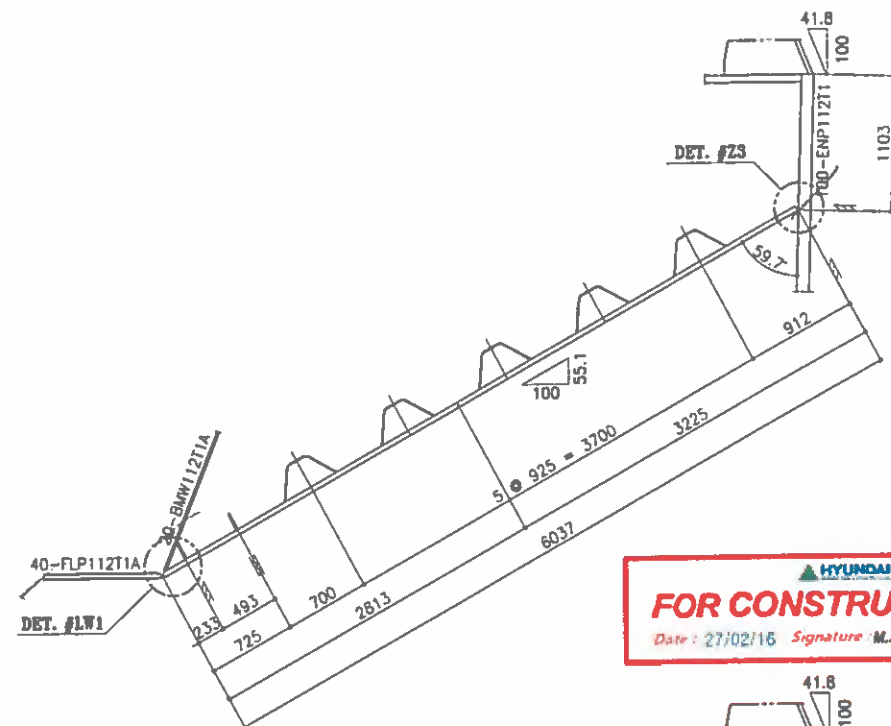
SECT. B1



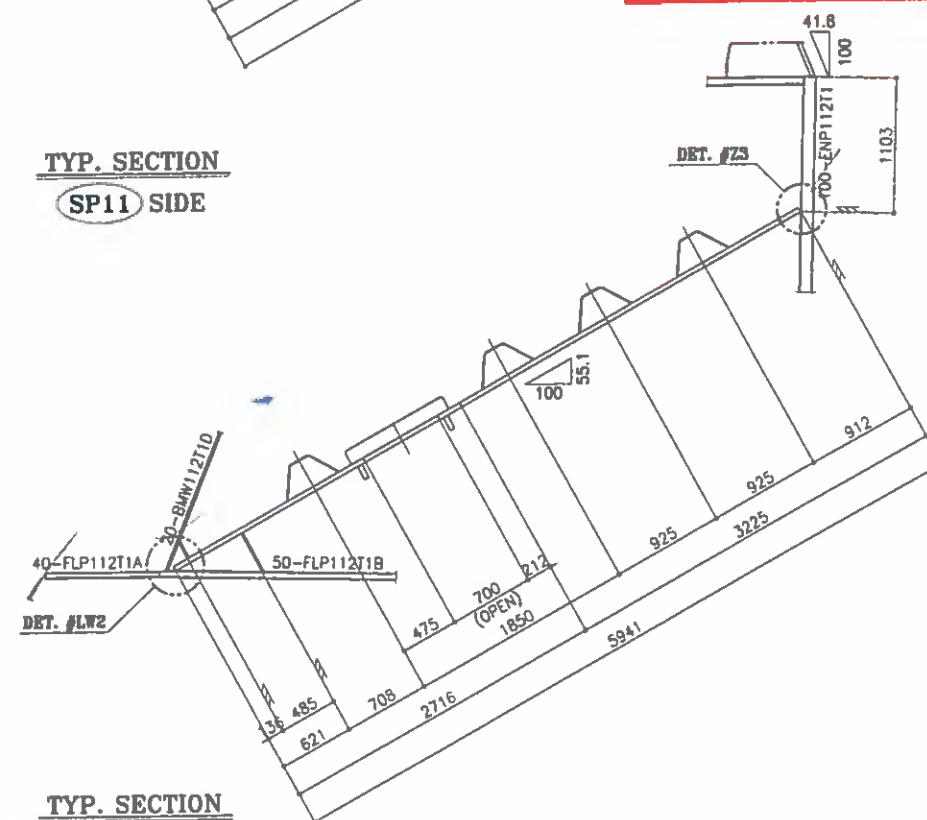
SECT. A2



SECT. B2



TYP. SECTION
SP11 SIDE



TYP. SECTION
[G112T2] JOINT SIDE

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE 

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G112T1	<STEEL DECK>	-	ONE			
TUB112T1B3	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1B4	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1B5	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1B6	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1B7	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1B8	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1C1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1C2	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1C3	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1C4	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T1D1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1D2	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1D3	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1D4	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T1D5	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1D6	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1D7	PL 30*848	2306	1	461	A709M Gr.345	
TUB112T1D8	PL 30*848	2306	1	461	A709M Gr.345	
TUP112T1A1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1A2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1A3	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1A4	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1B1	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP112T1B2	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP112T1B3	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP112T1B4	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP112T1C1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1C2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1D1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1D2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1D3	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP112T1D4	PIPE D168.3*7.11	3926	1	111	ASTM A53	
BEP01	PL 70*420	420	14	1357	A709M Gr.345	
BEP21	PL 10*280	280	14	86	A709M Gr.345	
C23WB	<DIAPHRAGM>	-	1	11387		
C24W	<DIAPHRAGM>	-	1	15219		
C25WB	<DIAPHRAGM>	-	1	13838		
USC01	<U-RIB CONNECTION>	-	12	564		
USC08	<U-RIB CONNECTION>	-	34	544		
USC09	<U-RIB CONNECTION>	-	4	64		
USC10	<U-RIB CONNECTION>	-	1	16		
USC11	<U-RIB CONNECTION>	-	1	16		
USC12	<U-RIB CONNECTION>	-	2	34		
USC13	<U-RIB CONNECTION>	-	1	46		
USC21	<U-RIB CONNECTION>	-	3	141		
USC29	<U-RIB CONNECTION>	-	20	260		
USC31	<U-RIB CONNECTION>	-	7	329		
USC37	<U-RIB CONNECTION>	-	13	26		
USC40	<U-RIB CONNECTION>	-	1	2		
	<NEXT PAGE>					

A	2018.02.25	FOR APPROVAL	H. PARK	S. S. SONG	S. J. KIM
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

STEEL DECK DETAIL "G112T1" (4)

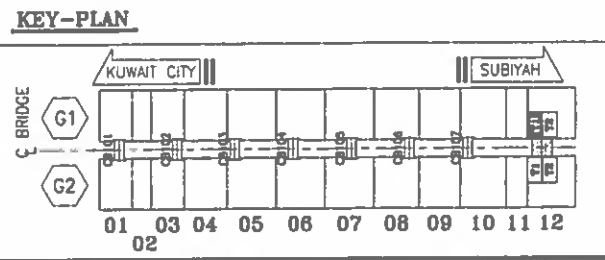
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK <i>[Signature]</i>	K.W. CHOI <i>[Signature]</i>	S.S. SON <i>[Signature]</i>	S.M. KHON <i>[Signature]</i>
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Consulting Company

DRAWING NO.	REV.
RA140-22-BRG-SD-D-112T1d	A

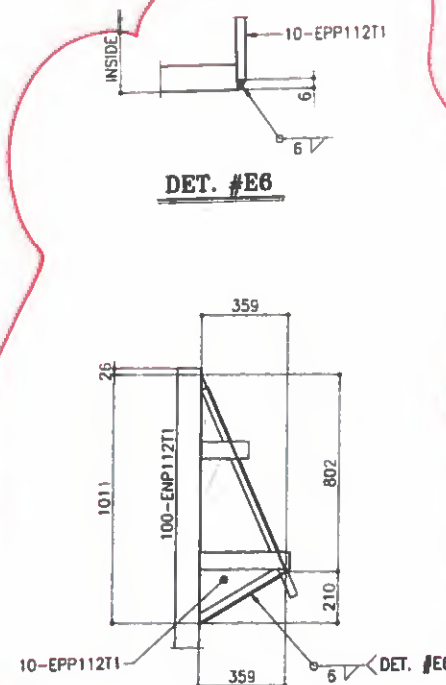


KEY-PLAN

- ## NOTES
1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP R= .35, C= .15 UNLESS NOTED
 3. ALL FILLET WELD:  UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 OR C15 OR C20: FILL WITH WELD

REF. DRAWING	
MARK	REF. DWG. NO.
GROOVE WELD DET	SD-WD-101-109
C23WB	SD-SEC-233-23
C24W	SD-SEC-241-24
C25WB	SD-SEC-245-24
USU*, USL*	SD-STD-001, 00
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-11
USC31 ~ USC40	SD-STD-121-12
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-14
ISC01 ~ ISC10	SD-STD-181-18
SPLICE	SD-STD-301-30
DS01, DS02	SD-STD-401-40

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G112T1	<STEEL DECK>	-	ONE			
USC51	<U-RIB CONNECTION>	-	12	12		
USC52	<U-RIB CONNECTION>	-	14	14		
USC60	<U-RIB CONNECTION>	-	5	5		
USC67	<U-RIB CONNECTION>	-	1	1		
USC68	<U-RIB CONNECTION>	-	1	1		
USC69	<U-RIB CONNECTION>	-	2	2		
USC71	<U-RIB CONNECTION>	-	1	1		
USC72	<U-RIB CONNECTION>	-	1	1		
ISC09	<I-RIB CONNECTION>	-	1	28		
ISC10	<I-RIB CONNECTION>	-	1	12		
S.TOTAL =				144720		

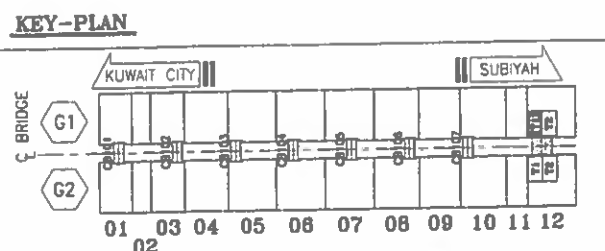
Refer To Sec. H.H.
on The design
draw. # CW-DW-34615-B2

"10-EPP112T1" DETAIL

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE *M.J. Lee*

EDGE FLANGE (EF)

ONE - STEEL DECK - G112T1



NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP $R = .25$, $C = .15$ UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING	
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU* , USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPlice	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

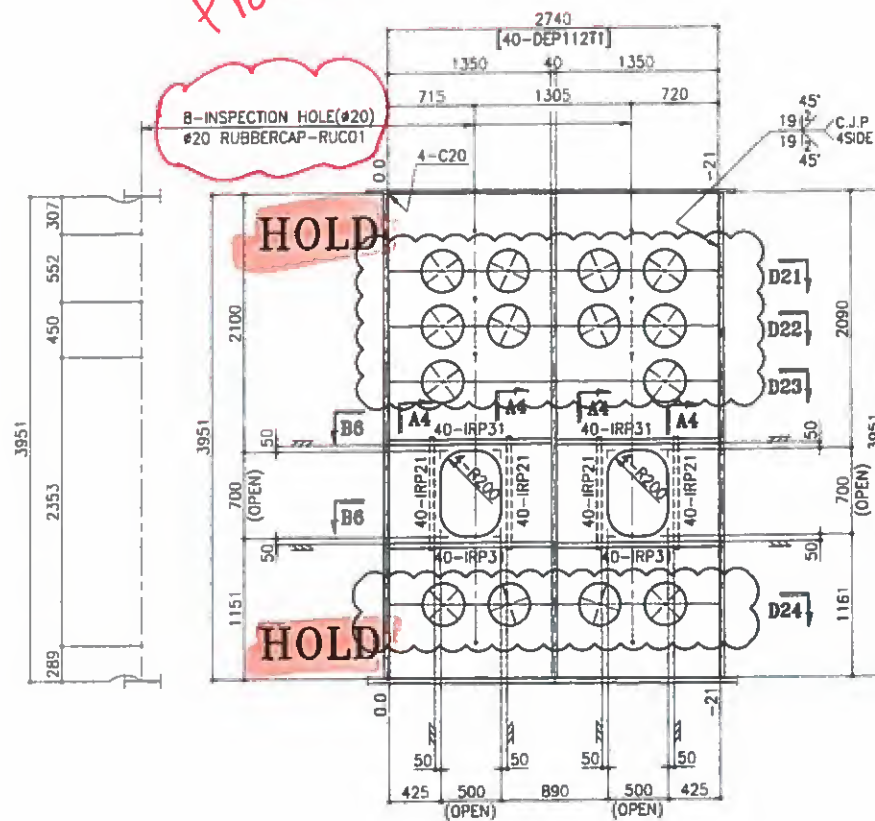
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (5)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK <i>HP</i>	K.W.CHOW <i>KWC</i>	S.S.SONG <i>SSS</i>	S.M.KHON <i>SMK</i>
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

2010-02-20	CONTRACTOR
------------	------------

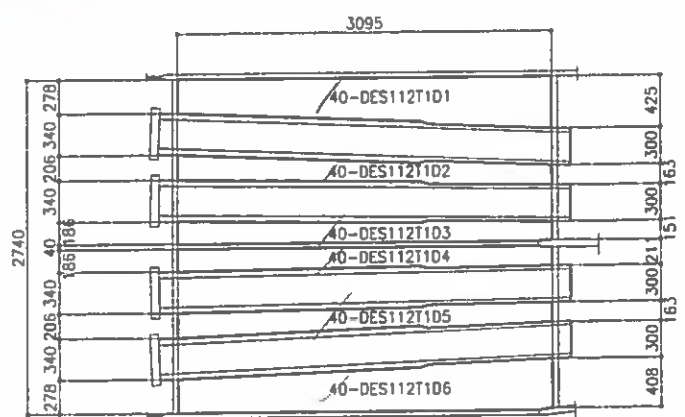
DRAWING NO.	REV.
RA140-22-BRG-SD-D-112T1e	A

Provide reference

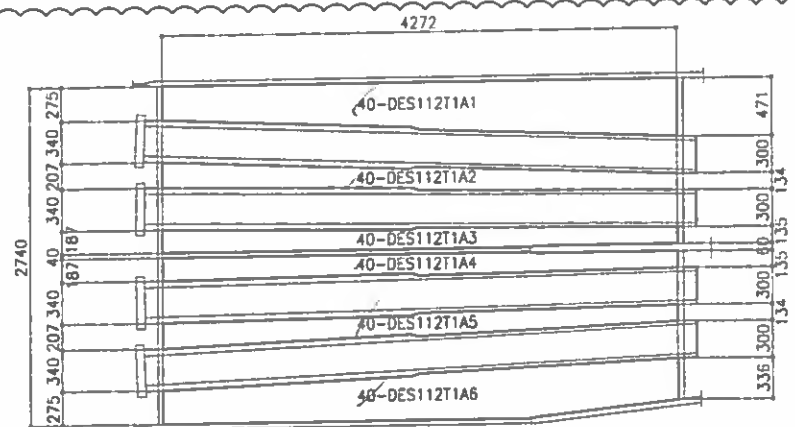


SECT. D1
"INSIDE END PLATE" DETAIL

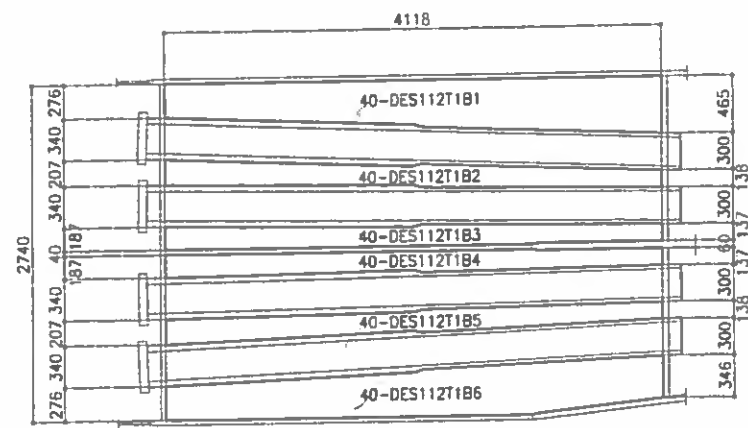
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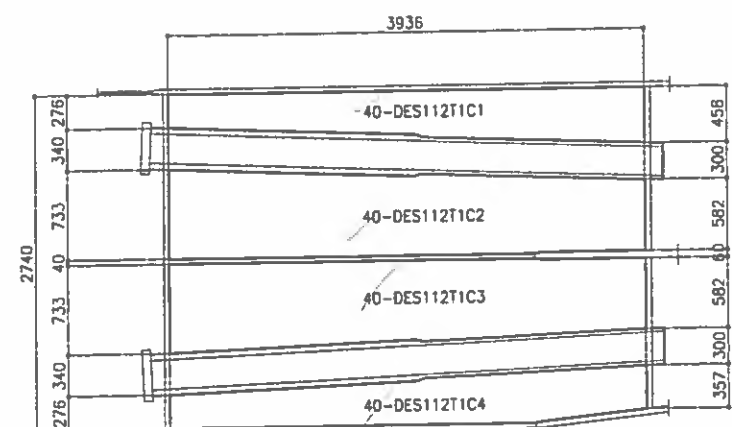
SECT. D24



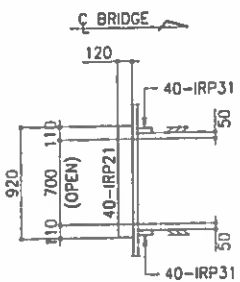
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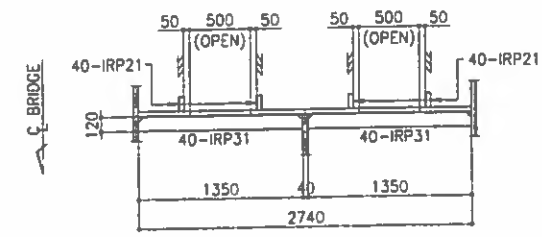
SECT. D22



SECT. D23



SECT. A4



SECT. B6

* Provide approved reference for welding details

c.j.p
45°

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES
1. MATERIALS SEE S.O.W. UNLESS NOTED
 2. SCALLOP R=25, C=15 mm UNLESS NOTED
 3. ALL FILLET WELD: $\frac{1}{4}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I. PARK	S.S. SON	S.M. KHORRAM

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

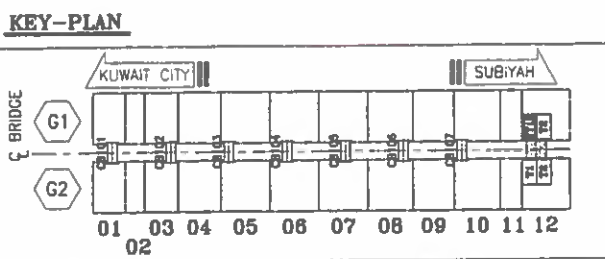
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (8)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHORRAM

CONTRACTOR
HYUNDAI E&S
YOULCHON

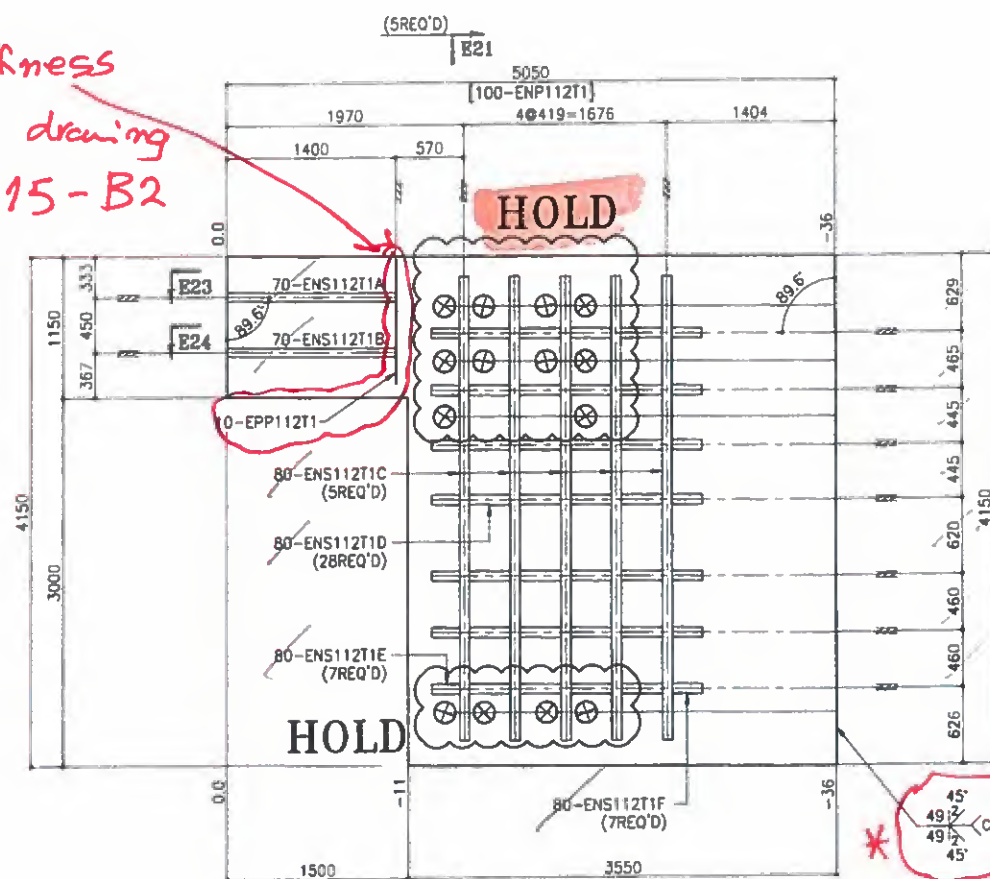
DRAWING NO
RA140-22-BRG-SD-D-112T1h

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

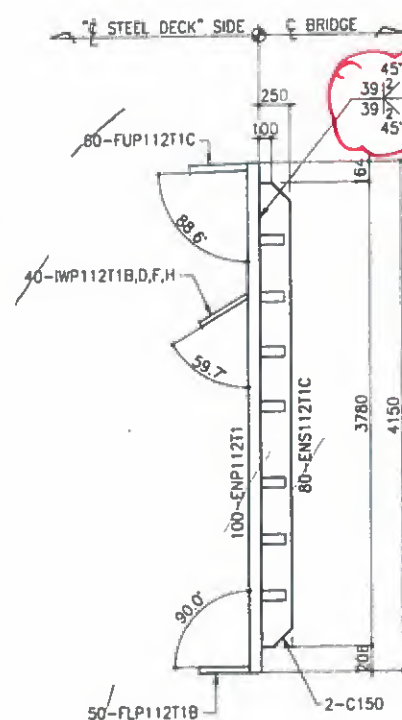


ONE - STEEL DECK - G112T1

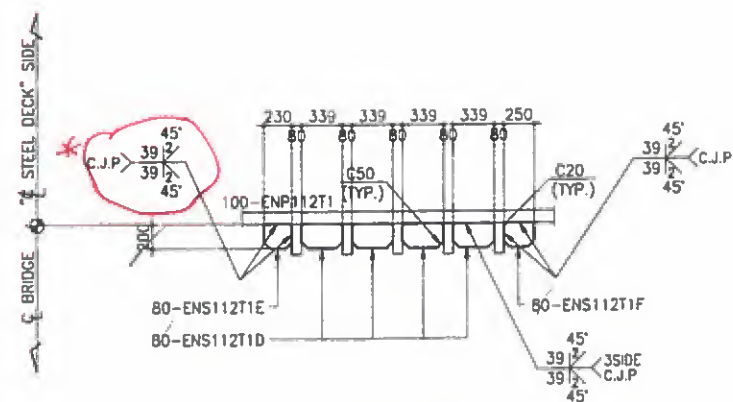
check plate thickness
with the design drawing
GW-DW-34615-B2
section H-H



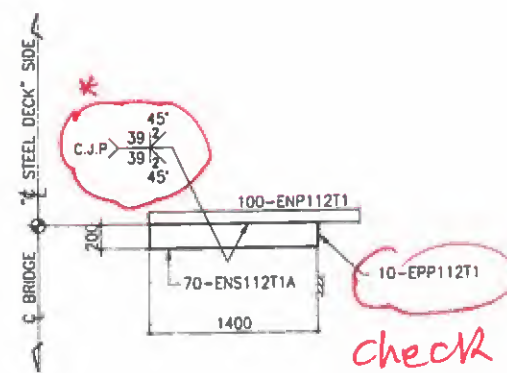
SECT. E1
"OUTSIDE END PLATE" DETAIL



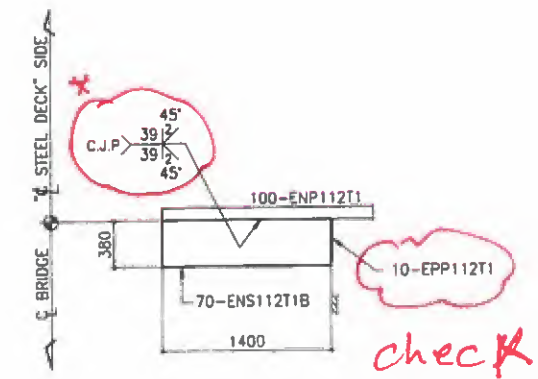
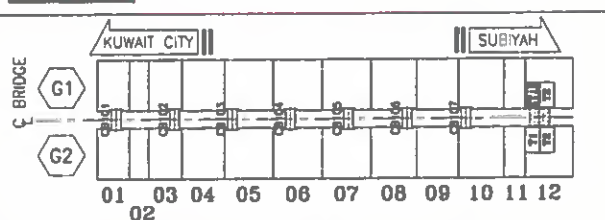
SECT. E21



SECT. E22



SECT. E23

SECT. E24

ONE - STEEL DECK - G112T1

* Provide reference.

FOR CONSTRUCTION
Date : 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= .35 , O= .15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-236
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-114
USC31 ~ USC40	SD-STD-121-125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-149
ISC01 ~ ISC10	SD-STD-181-184
SPLICE	SD-STD-301-305
DS01, DS02	SD-STD-401-403

A	2018.02.25	FOR APPROVAL			HJ PARK	S.S. SCHIFF	S.M. KHORRAM		
REV.	DATE	DESCRIPTION OF REVISION			DRAWN	CHEC.	APPROV.		

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

STEEL DECK DETAIL "G112T1" (9)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVE
NONE	H.I.PARK	K.W.CHOI	S.S.SOMER	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

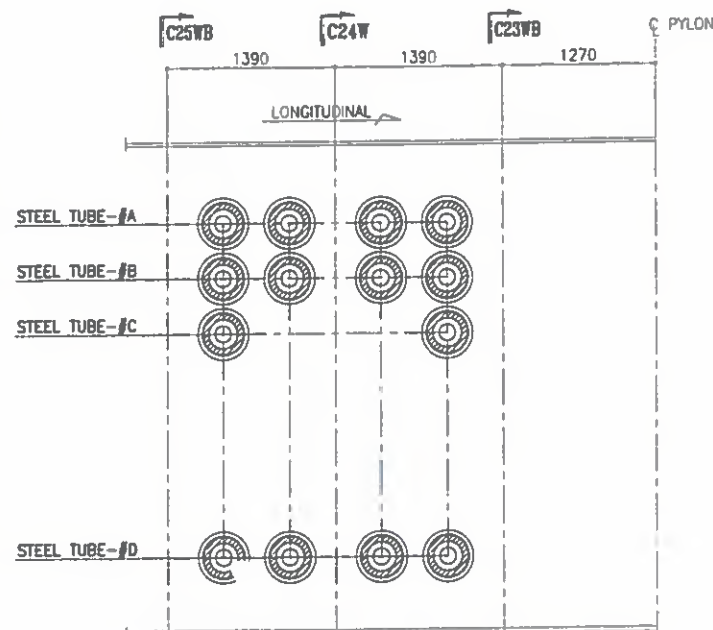
 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Controlling Companies

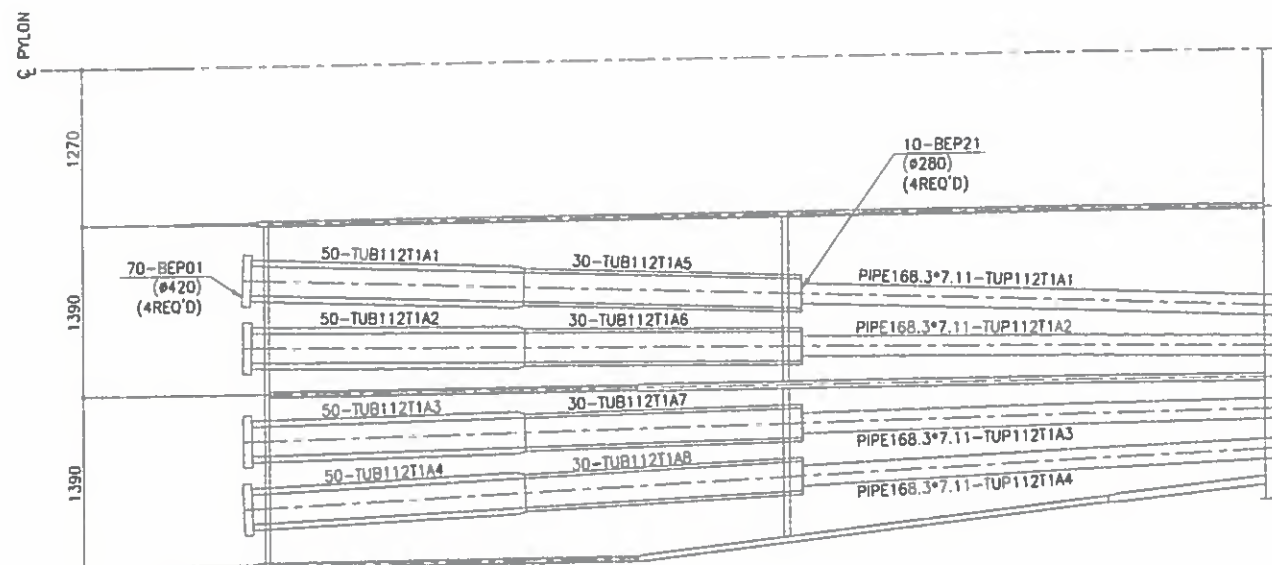
DRAWING NO.	REV.
RA140-22-BRG-SD-D-112T1j	A

FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

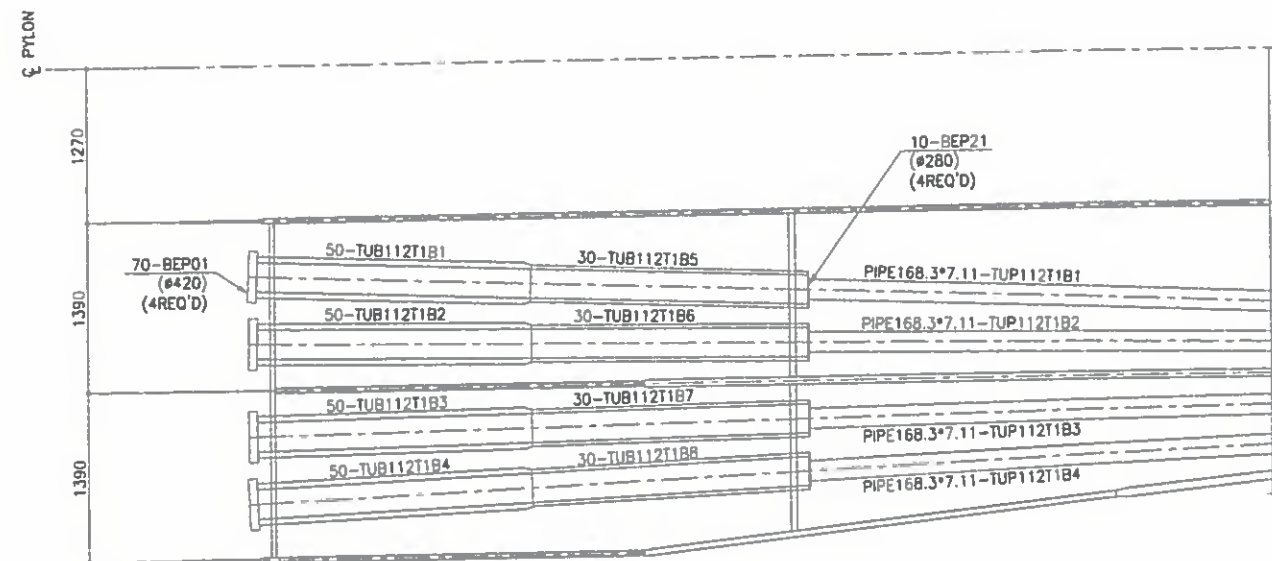
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STEEL TUBE ARRANGEMENT

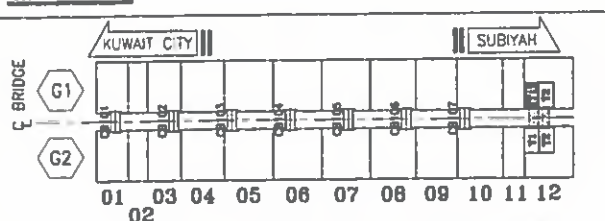


"STEEL TUBE-#A" DETAIL



"STEEL TUBE-#B" DETAIL

KEY-PLAN



ONE - STEEL DECK - G112T1

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SONH	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (10)

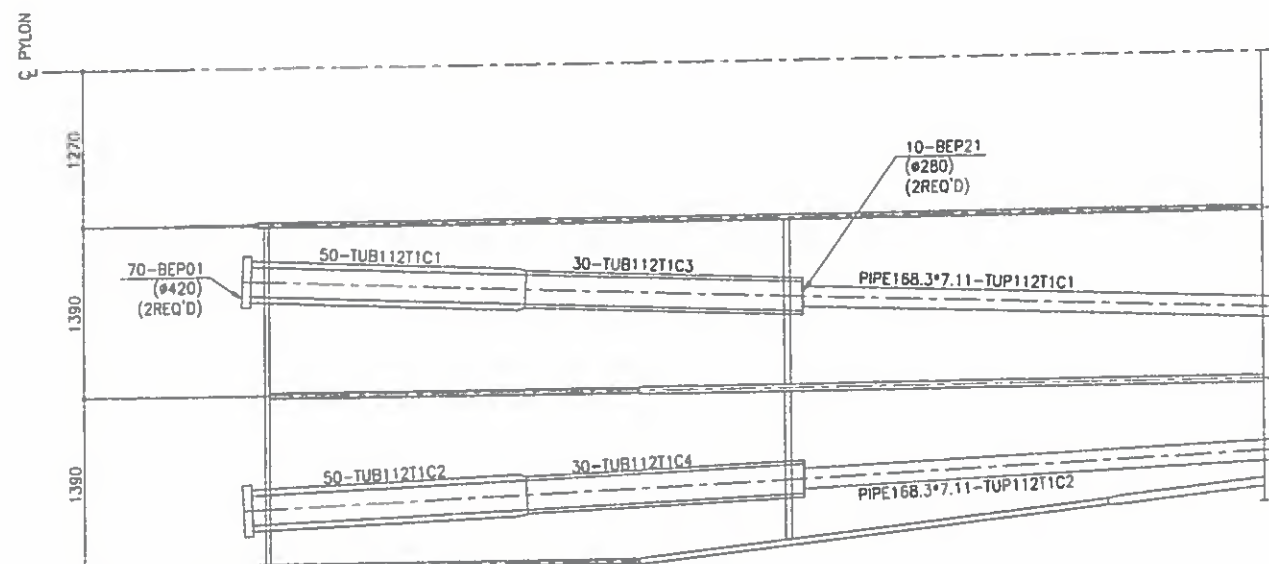
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W. CHOI	S.S.SONH	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

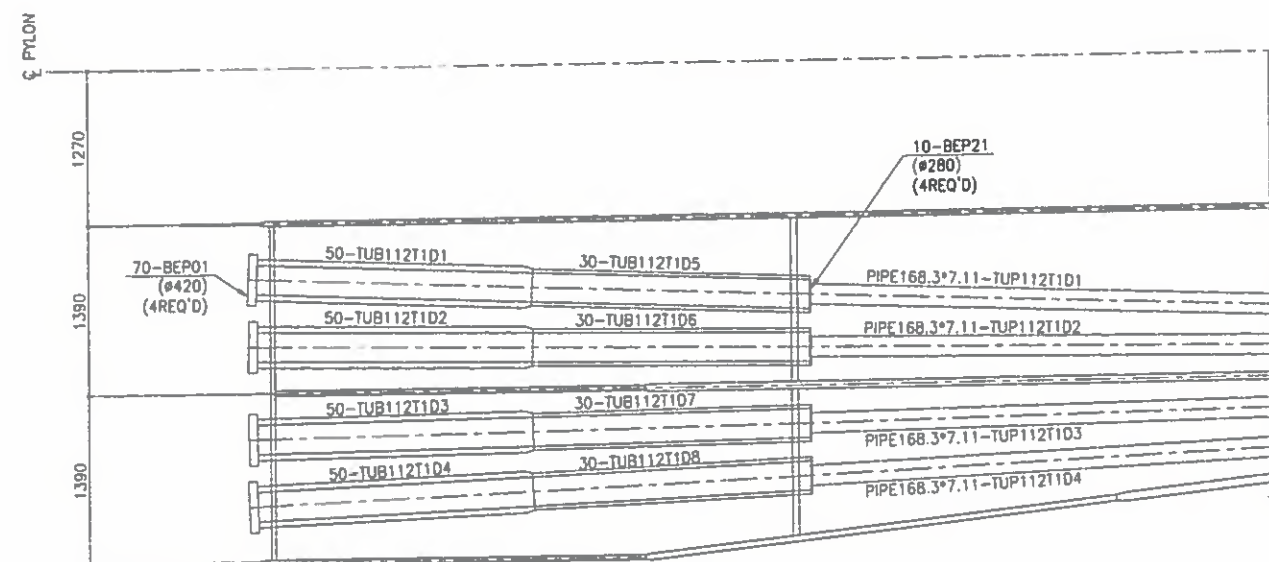
DRAWING NO.
RA140-22-BRG-SD-D-112T1k

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HOLD

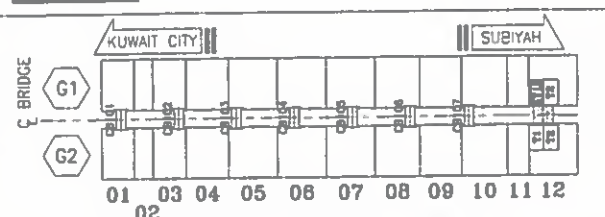


"STEEL TUBE-#C" DETAIL



"STEEL TUBE-#D" DETAIL

KEY-PLAN



ONE - STEEL DECK - G112T1

HYUNDAI E&S
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS: SEE B.O.M. UNLESS NOTED
2. SCALLOP R: 35, C: 15 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (11)

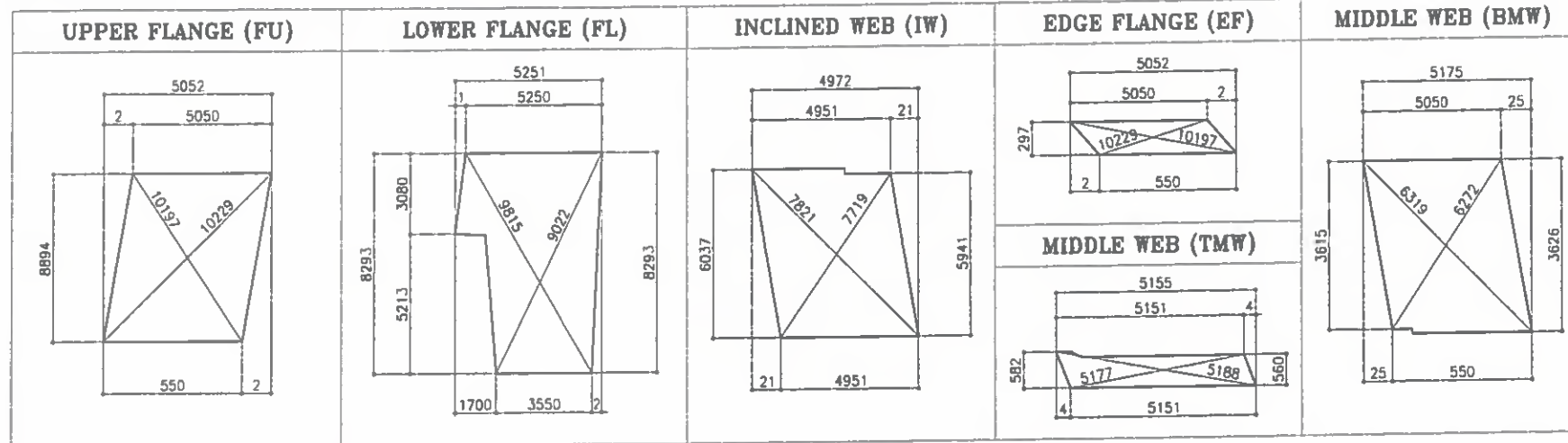
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
Combined Group

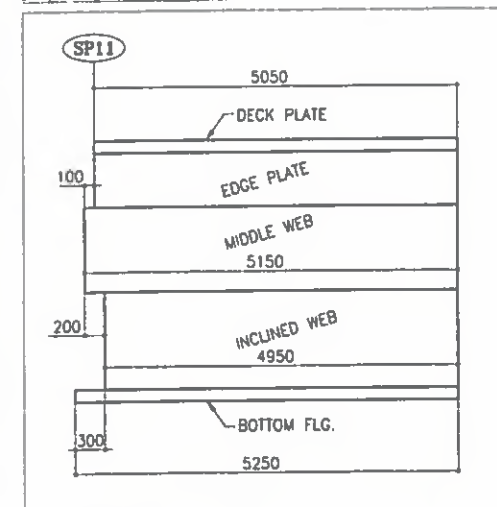
DRAWING NO.
RA140-22-BRG-SD-D-112T1m

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DIAGONAL



ASSEMBLY VIEW



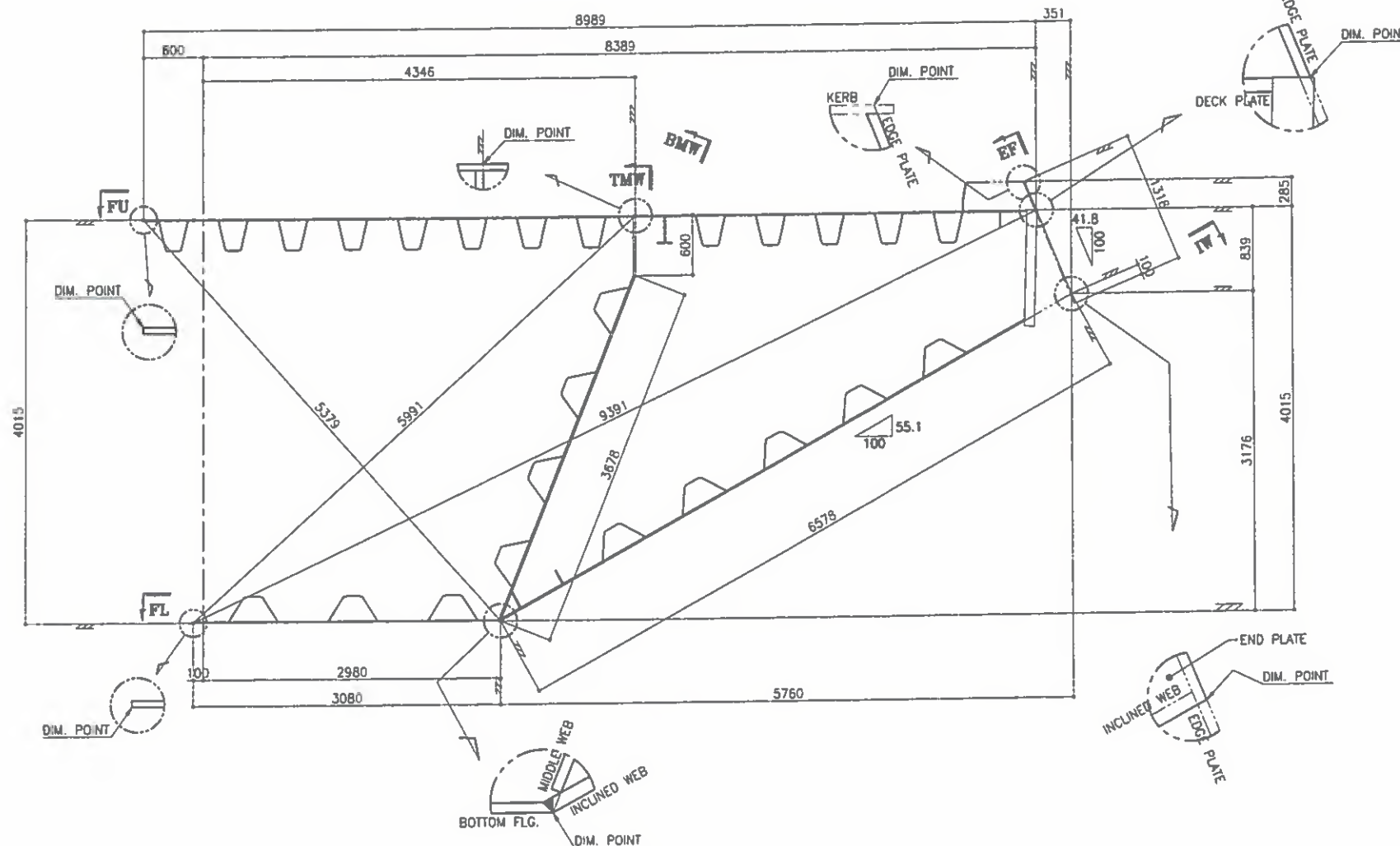
FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

NOTES

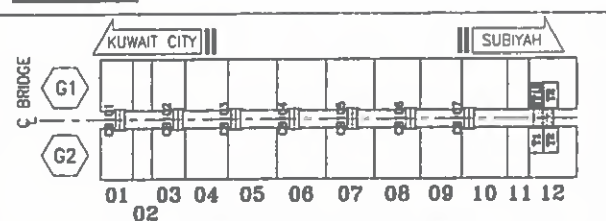
1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R=20, C=15 mm UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403



KEY-PLAN



GENERAL SECTION

SP11 SIDE

ONE - STEEL DECK - G12T1

FOR APPROVAL
 2016.02.25
 HYUNDAI E&S
 YOUNGCHON

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

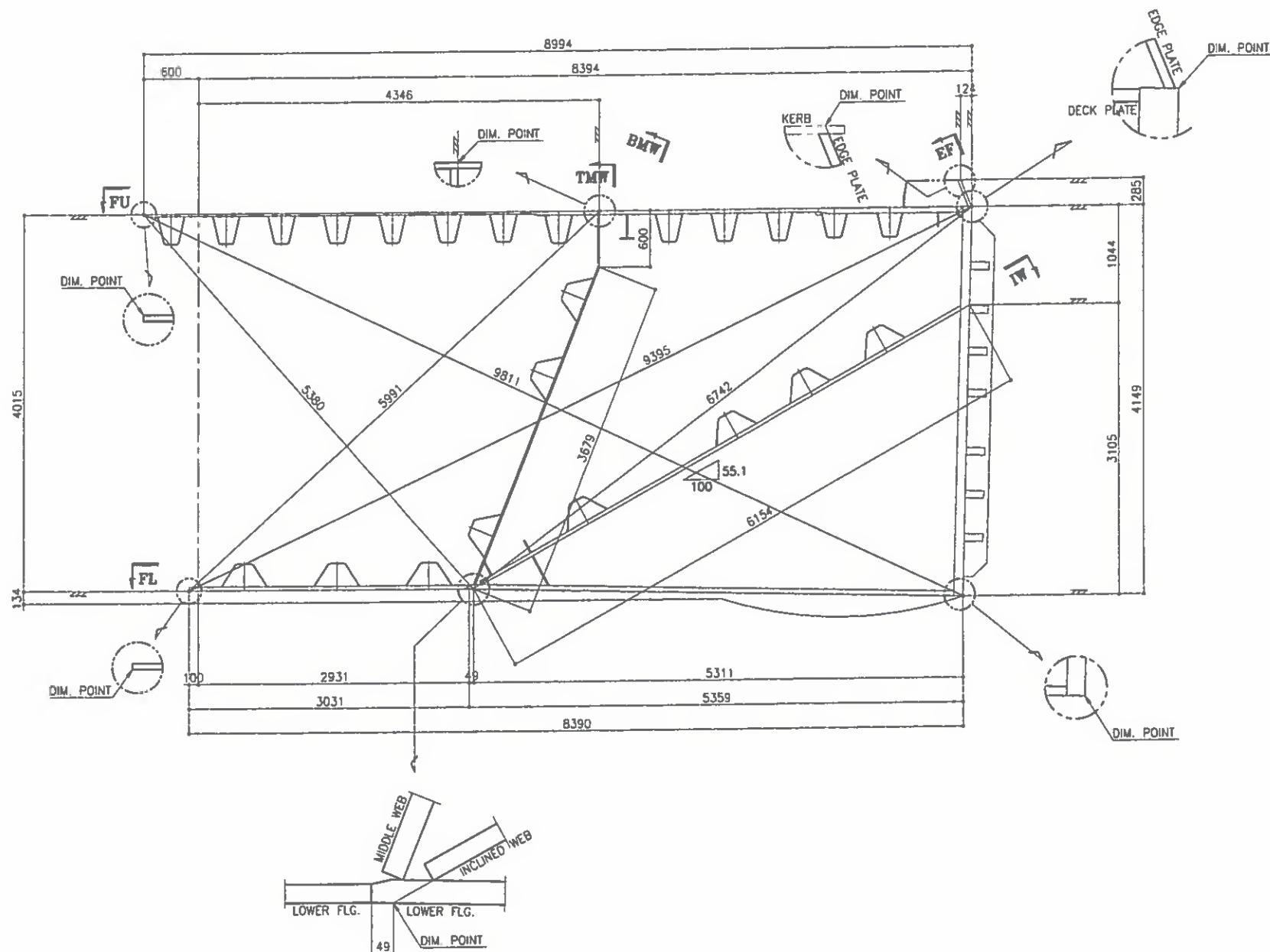
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G12T1" (12)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
 ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-D-112T1n

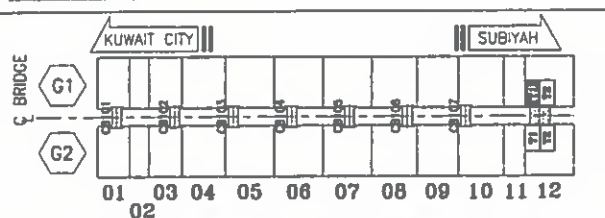
REV.
A



GENERAL SECTION
[G112T2] JOINT SIDE

ONE - STEEL DECK - G112T1

KEY-PLAN



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R= 35.0 or 15.0 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.:
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T1" (13)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



DRAWING NO.
RA140-22-BRG-SD-D-112T1p

REV.
A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

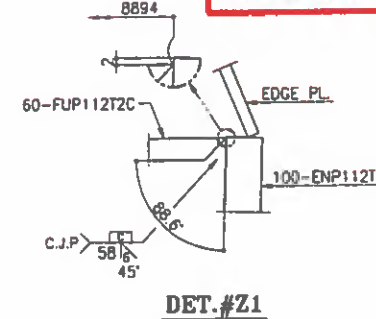
Refer To Comments on DW.
SD-D-112T1a-A

TABLE (U-RIB)

MARK	THK.	QTY	TYPE	CONNECTION	
				LEFT	RIGHT
URU112T2A	8	1	USU1	USC07	USC01
URU112T2B1	8	5	USU2	USC02	USC60
URU112T2B2	8	1	USU2	USC02	USC61
URU112T2B3	8	1	USU3	USC03	USC62
URU112T2B4	8	1	USU3	USC03	USC62
URU112T2B5	8	1	USU3	USC03	USC62
URU112T2B6	8	1	USU3	USC03	USC62
URU112T2B7	8	1	USU4	USC05	USC64
URU112T2B8	8	1	USU5	USC04	USC66
URU112T2C1	8	5	USU1	USC08	USC08
URU112T2C2	8	1	USU1	USC09	USC08
URU112T2C3	8	1	USU1	USC09	USC08
URU112T2C4	8	1	USU1	USC09	USC08
URU112T2C5	8	1	USU1	USC09	USC08
URU112T2C6	8	1	USU1	USC63	USC67
URU112T2C7	8	1	USU1	USC67	USC51
URU112T2C8	8	1	USU6	USC65	USC68
URU112T2C9	8	1	USU6	USC68	USC69
URU112T2D1	8	5	USU1	USC08	USC08
URU112T2D2	8	5	USU1	USC08	USC08
URU112T2D3	8	1	USU6	USC10	USC11
URU112T2E1	8	11	USU1	USC51	USC01
URU112T2E2	8	1	USU6	USC69	USC13
URU112T2F1	10	1	USU7	USC70	USC72
URU112T2F2	10	1	USU7	USC72	USC71
URU112T2F3	10	1	USU7	USC12	USC12

FOR CONSTRUCTION

Date: 27/02/16 Signature: M.J. LEE



NOTES

1. MATERIALS SEE S.D.M. UNLESS NOTED
2. SCALLOP R=35, C=15, UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G112T2	<STEEL DECK>		ONE			
FUP112T2A	PL 24*4193	5051	1	3990	A709M Gr.345	Q
FUP112T2B	PL 40*3135	5051	1	4972	A709M Gr.345	Q
FUP112T2C	PL 60*1566	5051	1	3726	A709M Gr.345	Q
URU112T2A	PL 8*744	4438	1	207	A709M Gr.345	Q
URU112T2B1	PL 8*732	668	5	154	A709M Gr.345	Q
URU112T2B2	PL 8*732	707	1	33	A709M Gr.345	Q
URU112T2B3	PL 8*699	770	1	34	A709M Gr.345	Q
URU112T2B4	PL 8*699	897	1	39	A709M Gr.345	Q
URU112T2B5	PL 8*699	960	1	42	A709M Gr.345	Q
URU112T2B6	PL 8*699	1024	1	45	A709M Gr.345	Q
URU112T2B7	PL 8*672	1077	1	45	A709M Gr.345	Q
URU112T2B8	PL 8*658	1140	1	47	A709M Gr.345	Q
URU112T2C1	PL 8*744	738	5	172	A709M Gr.345	Q
URU112T2C2	PL 8*744	700	1	33	A709M Gr.345	Q
URU112T2C3	PL 8*744	637	1	30	A709M Gr.345	Q
URU112T2C4	PL 8*744	510	1	24	A709M Gr.345	Q
URU112T2C5	PL 8*744	447	1	21	A709M Gr.345	Q
URU112T2C6	PL 8*744	535	1	25	A709M Gr.345	Q
URU112T2C7	PL 8*744	464	1	22	A709M Gr.345	Q
URU112T2C8	PL 8*726	472	1	22	A709M Gr.345	Q
URU112T2C9	PL 8*726	464	1	21	A709M Gr.345	Q
URU112T2D1	PL 8*744	738	5	172	A709M Gr.345	Q
URU112T2D2	PL 8*744	728	5	170	A709M Gr.345	Q
URU112T2D3	PL 8*728	728	1	33	A709M Gr.345	Q
URU112T2E1	PL 8*744	938	11	482	A709M Gr.345	Q
URU112T2E2	PL 8*726	938	1	43	A709M Gr.345	Q
URU112T2F1	PL 10*654	397	1	20	A709M Gr.345	Q
URU112T2F2	PL 10*654	464	1	24	A709M Gr.345	Q
URU112T2F3	PL 10*654	728	1	37	A709M Gr.345	Q
TRW112T2A	PL 15*192	1486	1	34	A709M Gr.345	Q
TRW112T2B	PL 15*150	802	1	14	A709M Gr.345	Q
TRW112T2C	PL 15*150	1340	1	24	A709M Gr.345	Q
TRW112T2D	PL 15*150	1250	1	22	A709M Gr.345	Q
TRW112T2E	PL 14*272	1139	1	34	A709M Gr.345	Q
TRW112T2F	PL 14*250	1170	1	32	A709M Gr.345	Q
TRW112T2G	PL 14*250	1340	1	37	A709M Gr.345	Q
TRW112T2H	PL 14*250	1250	1	34	A709M Gr.345	Q
TRF112T2A	PL 14*150	1143	1	19	A709M Gr.345	Q
TRF112T2B	PL 14*150	1182	1	19	A709M Gr.345	Q
TRF112T2C	PL 14*150	1340	1	22	A709M Gr.345	Q
TRF112T2D	PL 14*150	1250	1	21	A709M Gr.345	Q
CEP01	PL 12*55	110	1	1	A709M Gr.345	Q
FUP112T2A	PL 40*3080	5251	1	5078	A709M Gr.345	Q
FUP112T2B	PL 50*4071	5262	1	8408	A709M Gr.345	Q
URL112T2A	PL 6*756	868	3	93	A709M Gr.345	Q
URL112T2B	PL 6*756	738	6	158	A709M Gr.345	Q
URL112T2C	PL 6*756	938	3	100	A709M Gr.345	Q
BRW112T2A	PL 14*200	4287	1	94	A709M Gr.345	Q
BRF112T2A	PL 14*120	4187	1	55	A709M Gr.345	Q
CEP01	PL 12*55	110	1	1	A709M Gr.345	Q

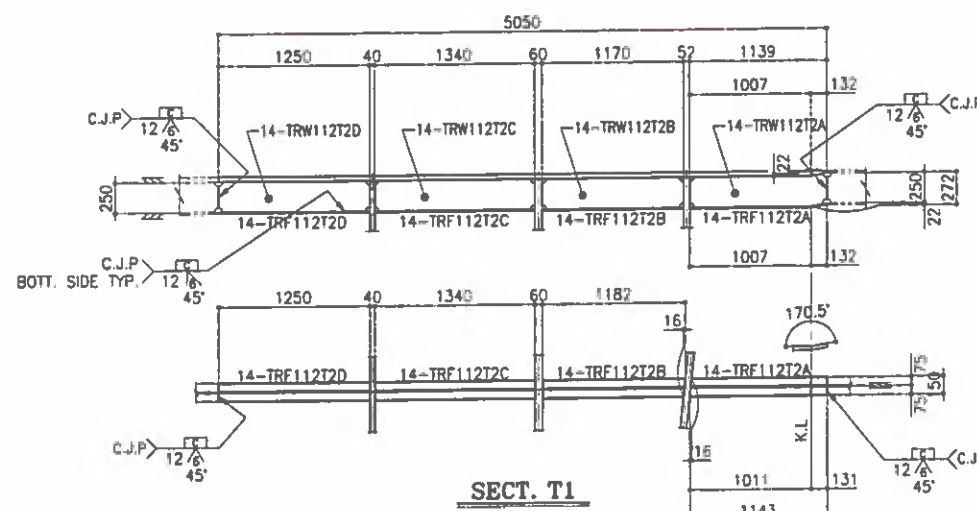
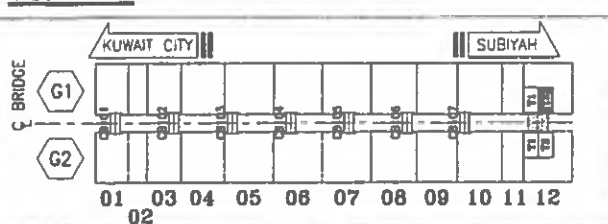
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UPPER FLANGE (FU)

- U-RIB INITIAL: URU
- U-RIB THICKNESS: 8t (U.N.O)

ONE - STEEL DECK - G112T2

KEY-PLAN



SECT. T1

(Refer To Comments on Draw. SD-D-112T16-A)

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R= 35 , D= 15 mm UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C16 : FILL WITH WELD

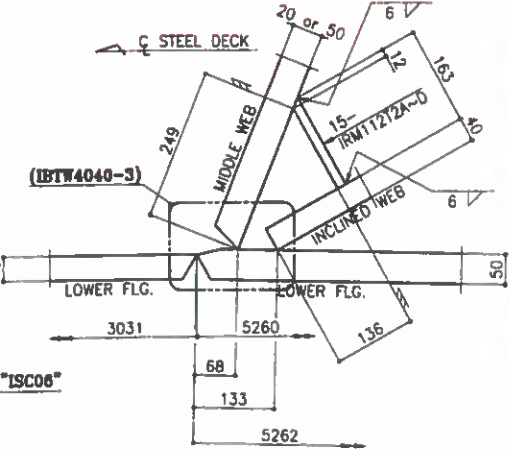
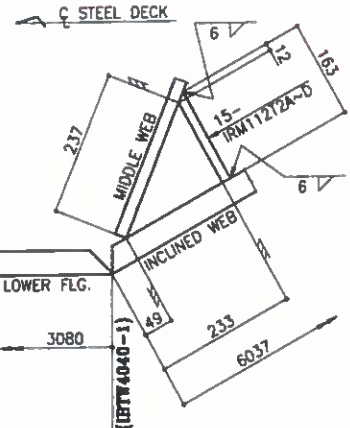
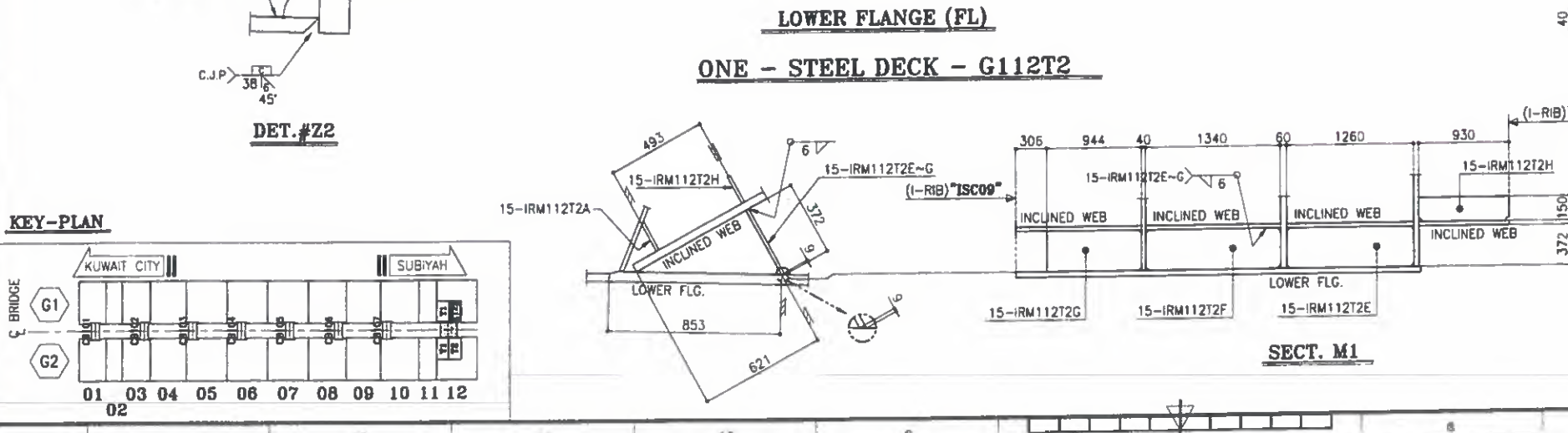
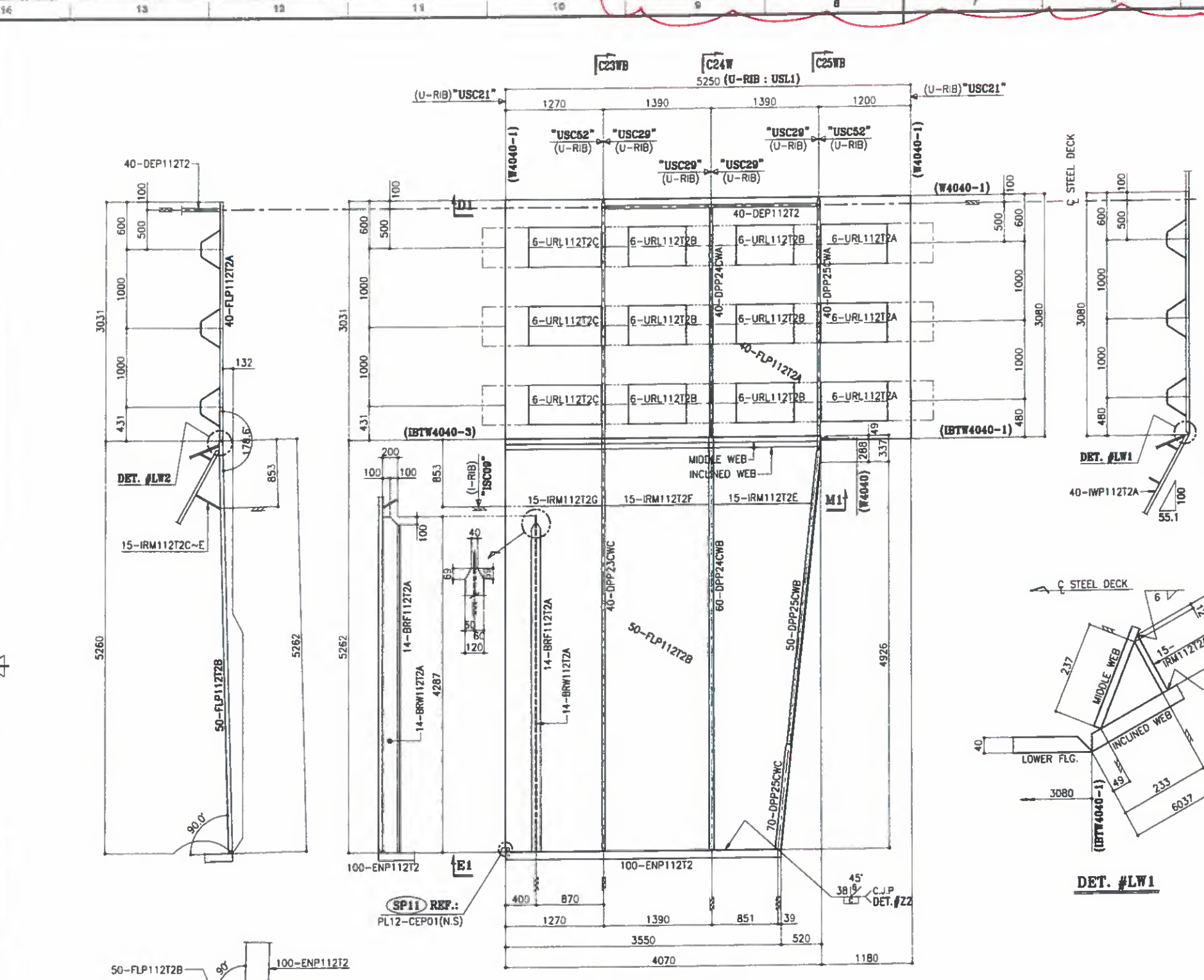
REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU* , USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G112T2	<STEEL DECK>	ONE				
NP112T2A	PL 40*2813	1224	1	1081	A709M Gr.345	
NP112T2B	PL 40*3225	1423	1	1441	A709M Gr.345	
NP112T2C	PL 40*2716	1350	1	1151	A709M Gr.345	
NP112T2D	PL 40*3225	1097	1	1111	A709M Gr.345	
NP112T2E	PL 40*2716	1350	1	1151	A709M Gr.345	
NP112T2F	PL 40*3225	1351	1	1368	A709M Gr.345	
NP112T2G	PL 40*2716	1260	1	1075	A709M Gr.345	
NP112T2H	PL 40*3225	1261	1	1277	A709M Gr.345	
UR112T2A1	PL 6*756	713	1	25	A709M Gr.345	
UR112T2A2	PL 6*756	798	1	28	A709M Gr.345	
UR112T2A3	PL 6*756	884	1	31	A709M Gr.345	
UR112T2A4	PL 6*756	967	1	34	A709M Gr.345	
UR112T2A5	PL 6*756	1045	1	37	A709M Gr.345	
UR112T2B1	PL 6*756	602	1	21	A709M Gr.345	
UR112T2B2	PL 6*756	431	1	15	A709M Gr.345	
UR112T2B3	PL 6*756	499	1	18	A709M Gr.345	
UR112T2B4	PL 6*756	470	1	17	A709M Gr.345	
UR112T2C	PL 6*756	728	3	78	A709M Gr.345	
UR112T2D	PL 6*756	938	4	134	A709M Gr.345	
IRW112T2A	PL 15*163	579	1	11	A709M Gr.345	
IRW112T2B	PL 15*163	1325	1	25	A709M Gr.345	
IRW112T2C	PL 15*163	1340	1	26	A709M Gr.345	
IRW112T2D	PL 15*163	944	1	18	A709M Gr.345	
IRW112T2E	PL 15*372	1260	1	55	A709M Gr.345	
IRW112T2F	PL 15*372	1340	1	59	A709M Gr.345	
IRW112T2G	PL 15*372	944	1	41	A709M Gr.345	
IRW112T2H	PL 15*150	930	1	16	A709M Gr.345	
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP22	PL 40*120	720	4	163	A709M Gr.345	
CEP01	PL 12*55	110	1	1	A709M Gr.345	
EPF112T2A	PL 32*298	5052	1	378	A709M Gr.345	
EPF112T2B	PL 32*228	1403	1	80	A709M Gr.345	
EPF112T2C	PL 32*416	1404	1	147	A709M Gr.345	
EPF112T2D	PL 32*127	1402	1	45	A709M Gr.345	
EPF112T2E	PL 40*357	1402	1	157	A709M Gr.345	
EPF112T2F	PL 10*359	1011	1	28	A709M Gr.345	
TW112T2A	PL 20*582	1210	1	111	A709M Gr.345	
TW112T2B	PL 50*560	1206	1	265	A709M Gr.345	
TW112T2C	PL 50*560	1344	1	295	A709M Gr.345	
TW112T2D	PL 20*580	1254	1	110	A709M Gr.345	
BW112T2A	PL 20*3615	1231	1	699	A709M Gr.345	
BW112T2B	PL 50*3626	1365	1	1943	A709M Gr.345	
BW112T2C	PL 50*3626	1365	1	1943	A709M Gr.345	
BW112T2D	PL 20*3626	1275	1	726	A709M Gr.345	
URM112T2A	PL 6*756	893	1	32	A709M Gr.345	
URM112T2B	PL 6*756	857	1	31	A709M Gr.345	
URM112T2C	PL 6*756	821	1	29	A709M Gr.345	
URM112T2D	PL 6*756	785	1	28	A709M Gr.345	
URM112T2E	PL 6*756	938	3	100	A709M Gr.345	



FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE STEEL DECK
STEEL DECK DETAIL "G112T2" (2)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON

DATE ISSUED: 2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-D-112T2b

REV. **A**

Refer To Comments on Dnw.
SD-D-112TIC-A

HOLD

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G112T2	<STEEL DECK>	-	ONE			
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP23	PL 40*120	1278	1	48	A709M Gr.345	
IRP24	PL 40*120	1316	1	50	A709M Gr.345	
IRP25	PL 40*120	1340	2	101	A709M Gr.345	
DEP112T2	PL 40*3972	2740	1	3417	A709M Gr.345	
DES112T2A1	PL 40*471	4272	1	632	A709M Gr.345	
DES112T2A2	PL 40*207	4272	1	278	A709M Gr.345	
DES112T2A3	PL 40*187	4272	1	251	A709M Gr.345	
DES112T2A4	PL 40*187	4272	1	251	A709M Gr.345	
DES112T2A5	PL 40*207	4272	1	278	A709M Gr.345	
DES112T2A6	PL 40*336	4272	1	451	A709M Gr.345	
DES112T2B1	PL 40*465	4118	1	601	A709M Gr.345	
DES112T2B2	PL 40*207	4118	1	268	A709M Gr.345	
DES112T2B3	PL 40*187	4118	1	242	A709M Gr.345	
DES112T2B4	PL 40*187	4118	1	242	A709M Gr.345	
DES112T2B5	PL 40*207	4118	1	268	A709M Gr.345	
DES112T2B6	PL 40*346	4118	1	447	A709M Gr.345	
DES112T2C1	PL 40*458	3936	1	566	A709M Gr.345	
DES112T2C2	PL 40*733	3936	1	906	A709M Gr.345	
DES112T2C3	PL 40*733	3936	1	906	A709M Gr.345	
DES112T2C4	PL 40*357	3936	1	441	A709M Gr.345	
DES112T2D1	PL 40*425	3095	1	413	A709M Gr.345	
DES112T2D2	PL 40*206	3095	1	200	A709M Gr.345	
DES112T2D3	PL 40*186	3095	1	181	A709M Gr.345	
DES112T2D4	PL 40*186	3095	1	181	A709M Gr.345	
DES112T2D5	PL 40*206	3095	1	200	A709M Gr.345	
DES112T2D6	PL 40*408	3095	1	397	A709M Gr.345	
IRP21	PL 40*120	920	4	139	A709M Gr.345	
IRP31	PL 40*120	1350	4	203	A709M Gr.345	
RUC01	RUBBERCAP D20	-	8		RUBBER	
ENP112T2	PL 100*4150	5080	1	16549	A709M Gr.345	
ENS112T2A	PL 70*200	1400	1	154	A709M Gr.345	
ENS112T2B	PL 70*380	1400	1	292	A709M Gr.345	
ENS112T2C	PL 80*250	3780	5	2967	A709M Gr.345	
ENS112T2D	PL 80*200	339	28	1192	A709M Gr.345	
ENS112T2E	PL 80*200	230	7	202	A709M Gr.345	
ENS112T2F	PL 80*200	250	7	220	A709M Gr.345	
TUB112T2A1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T2A2	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T2A3	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T2A4	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T2A5	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T2A6	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T2A7	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T2A8	PL 30*848	2296	1	459	A709M Gr.345	
TUB112T2B1	PL 50*911	2280	1	815	A709M Gr.345	
TUB112T2B2	PL 50*911	2280	1	815	A709M Gr.345	

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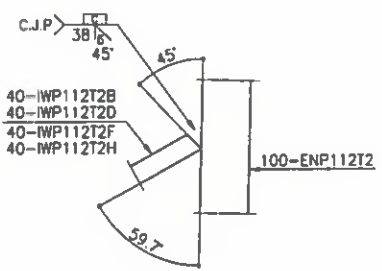
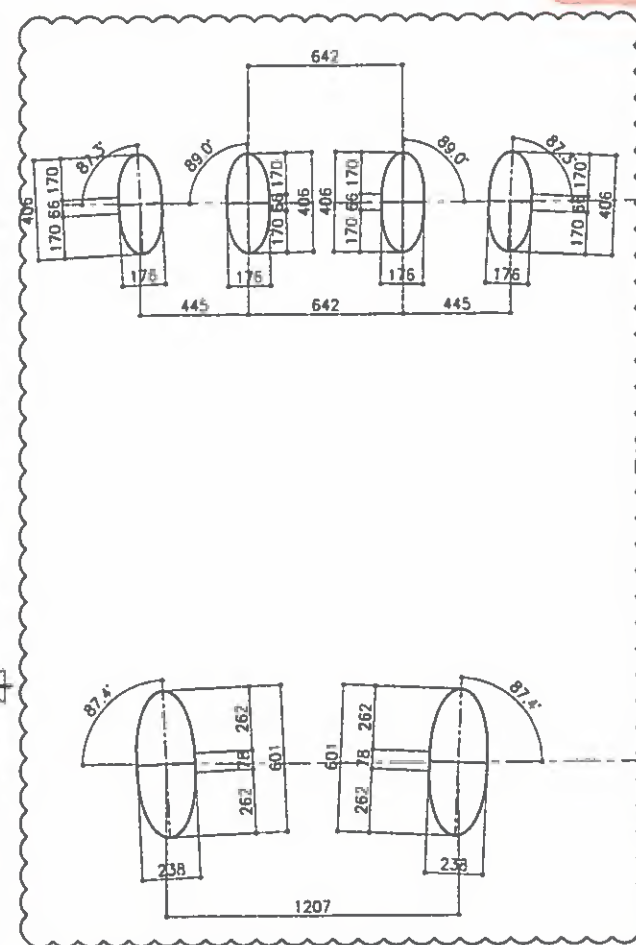
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-236
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-114
USC31 ~ USC40	SD-STD-121-125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-149
ISC01 ~ ISC10	SD-STD-181-184
SPLICE	SD-STD-301-305
DS01, DS02	SD-STD-401-403

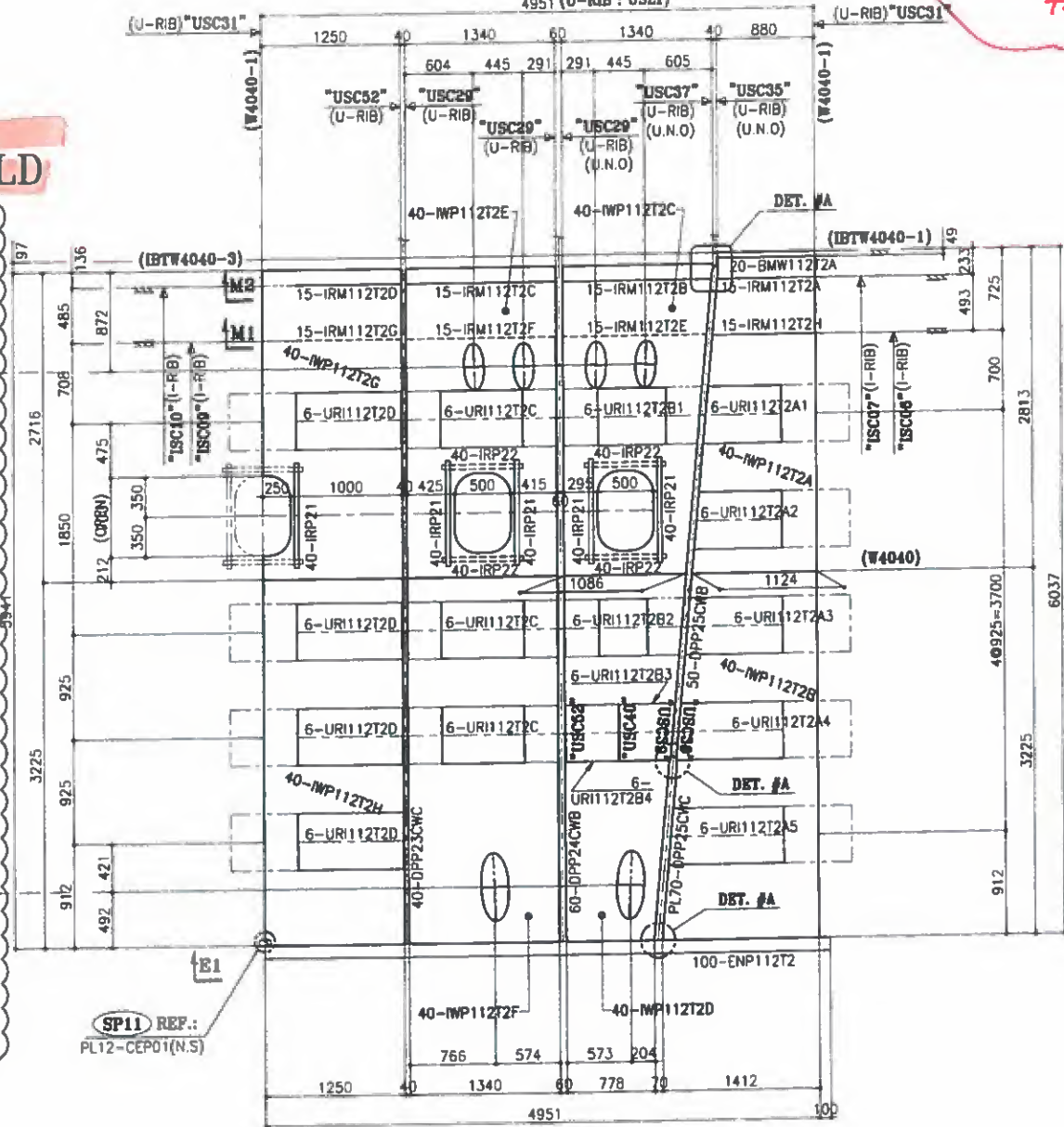
- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R=35.0, O=15.0 UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15 or C20: FILL WITH WELD

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

A 2016.02.25 FOR APPROVAL		H.J.PARK S.S.SON S.M.KHON	
REV.	DATE	DESCRIPTION OF REVISION	APPRO.
EMPLOYER			
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION			
PROJECT TITLE			
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140			
DRAWING TITLE			
MAIN BRIDGE STEEL DECK STEEL DECK DETAIL "G112T2" (3)			
SCALE	DRAWN	DESIGNED	CHECKED
NONE	H.J.PARK	K.W.CHOI	S.S.SON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25
CONTRACTOR			
HYUNDAI E&S YOULCHON			
DRAWING NO.			
RA140-22-BRG-SD-D-112T2c			
REV.			
A			

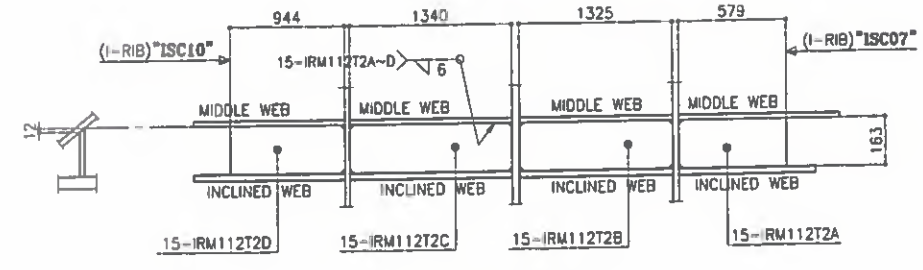


DET. #23

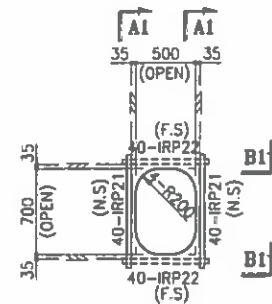


INCLINED WEB (IW)

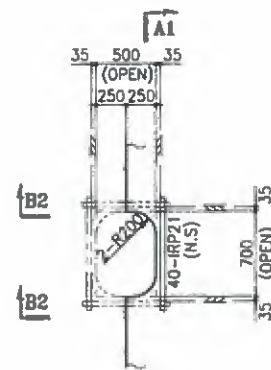
ONE - STEEL DECK - G112T2



SECT. M2

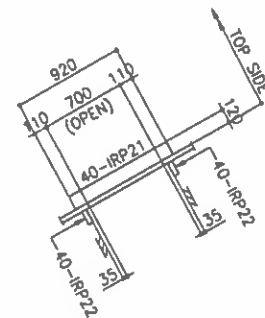


DIAPH. IN SIDE

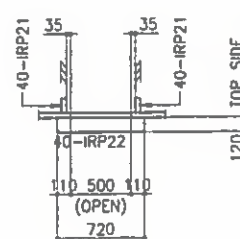


[G112T1] JOINT SIDE

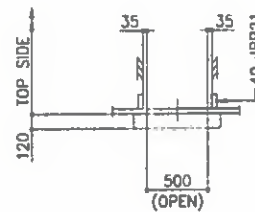
"ACCESS HOLE" DETAIL



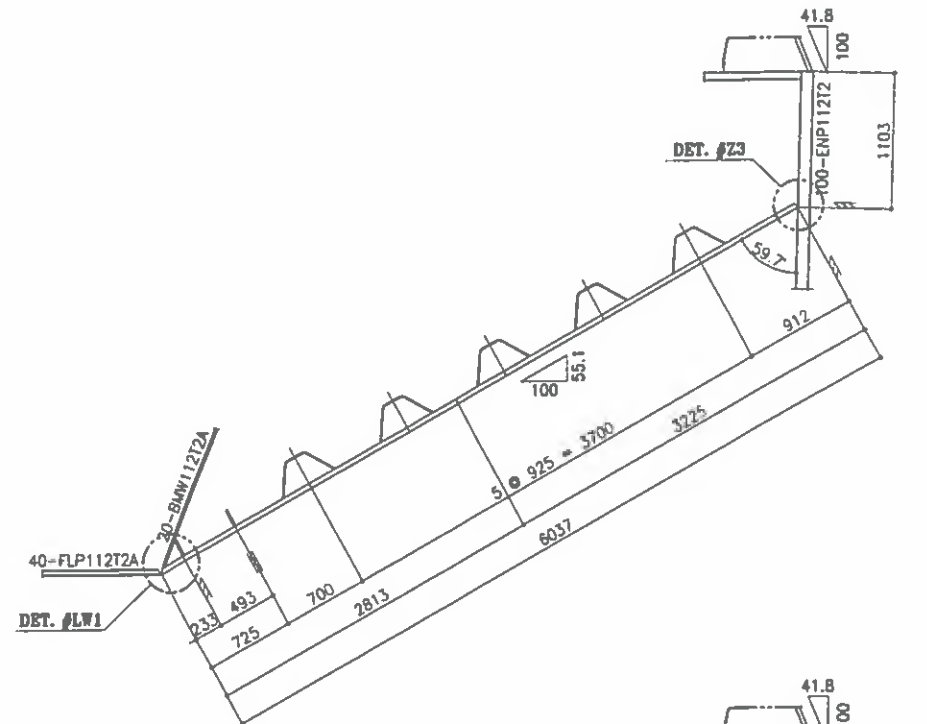
SECT. A1



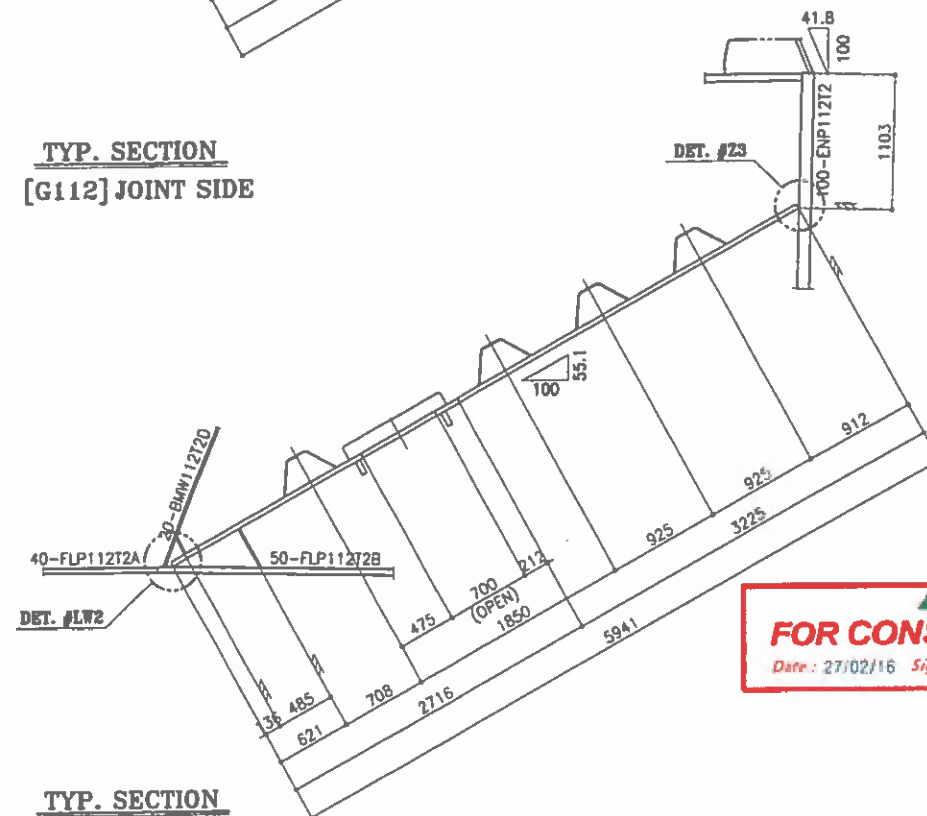
SECT. B1



SECT. B2

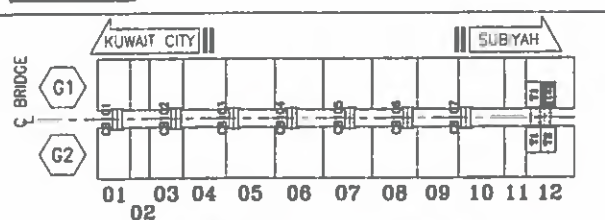


TYP. SECTION
[G112] JOINT SIDE



TYP. SECTION
[G112T1] JOINT SIDE

KEY-PLAN



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP ϕ 35, ϕ 15 mm UNLESS NOTED
3. ALL FILLET WELD ϕ 15 mm UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G112T2	<STEEL DECK>	-	ONE	-	-	-
RU8112T2B5	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2B4	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2B5	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2B6	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2B7	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2B8	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2C1	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2C2	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2C3	PL 30*848	2296	1	459	A709M Gr.345	-
RU8112T2C4	PL 30*848	2296	1	459	A709M Gr.345	-
RU8112T2D1	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2D2	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2D3	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2D4	PL 50*911	2280	1	815	A709M Gr.345	-
RU8112T2D5	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2D6	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2D7	PL 30*848	2306	1	461	A709M Gr.345	-
RU8112T2D8	PL 30*848	2306	1	461	A709M Gr.345	-
RU112T2A1	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2A2	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2A3	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2A4	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2B1	PIPE D168.3*7.11	3936	1	111	ASTM A53	-
RU112T2B2	PIPE D168.3*7.11	3936	1	111	ASTM A53	-
RU112T2B3	PIPE D168.3*7.11	3936	1	111	ASTM A53	-
RU112T2B4	PIPE D168.3*7.11	3936	1	111	ASTM A53	-
RU112T2C1	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2C2	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2D1	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2D2	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2D3	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
RU112T2D4	PIPE D168.3*7.11	3926	1	111	ASTM A53	-
BEP01	PL 70*420	420	14	1357	A709M Gr.345	-
BEP21	PL 10*280	280	14	86	A709M Gr.345	-
C23WB	<DIAPHRAGM>	-	1	11387	-	-
C24W	<DIAPHRAGM>	-	1	15219	-	-
C25WB	<DIAPHRAGM>	-	1	13838	-	-
USC01	<U-RIB CONNECTION>	-	12	564	-	-
USC08	<U-RIB CONNECTION>	-	34	544	-	-
USC09	<U-RIB CONNECTION>	-	4	64	-	-
USC10	<U-RIB CONNECTION>	-	1	16	-	-
USC11	<U-RIB CONNECTION>	-	1	16	-	-
USC12	<U-RIB CONNECTION>	-	2	34	-	-
USC13	<U-RIB CONNECTION>	-	1	46	-	-
USC21	<U-RIB CONNECTION>	-	3	141	-	-
USC29	<U-RIB CONNECTION>	-	20	260	-	-
USC31	<U-RIB CONNECTION>	-	7	329	-	-
USC37	<U-RIB CONNECTION>	-	13	26	-	-
USC40	<U-RIB CONNECTION>	-	1	2	-	-

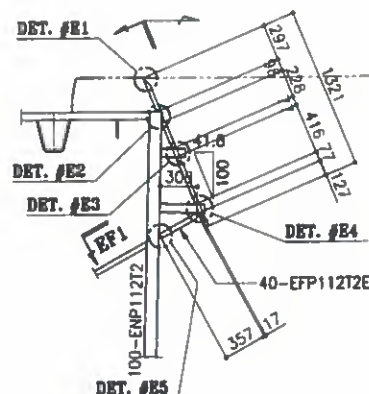
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.PARK	S.S.SONH	S.M.KHON
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK STEEL DECK DETAIL "G112T2" (4)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
NONE	H.PARK	K.W.CHOI	S.S.SONH	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOULCHON					
DRAWING NO.					REV.
RA140-22-BRG-SD-D-112T2d					A

Refer To Comments on Draw. # SD-D-112 (1E-A)

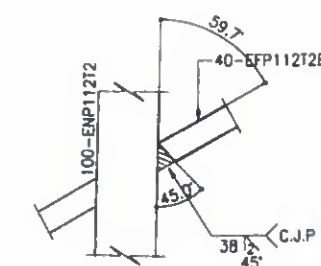
BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G112T2	<STEEL DECK>	—	ONE			
USC51	<U-RIB CONNECTION>	—	12	12		
USC52	<U-RIB CONNECTION>	—	14	14		
USC60	<U-RIB CONNECTION>	—	5	5		
USC67	<U-RIB CONNECTION>	—	1	1		
USC68	<U-RIB CONNECTION>	—	1	1		
USC69	<U-RIB CONNECTION>	—	2	2		
USC71	<U-RIB CONNECTION>	—	1	1		
USC72	<U-RIB CONNECTION>	—	1	1		
ISC09	<I-RIB CONNECTION>	—	1	28		
ISC10	<I-RIB CONNECTION>	—	1	12		

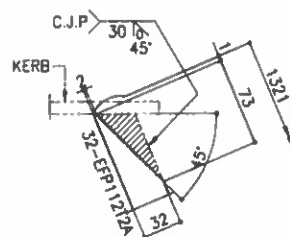
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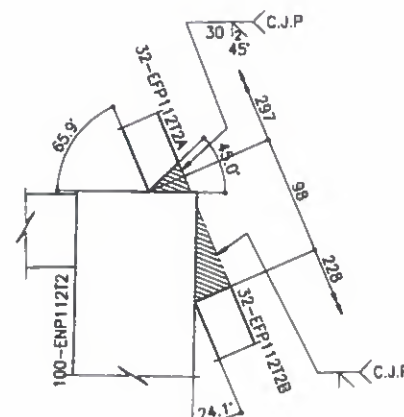
DET. #E1



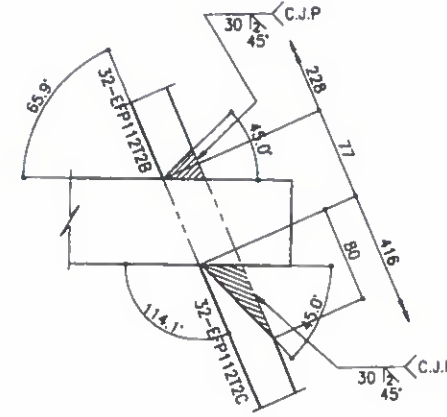
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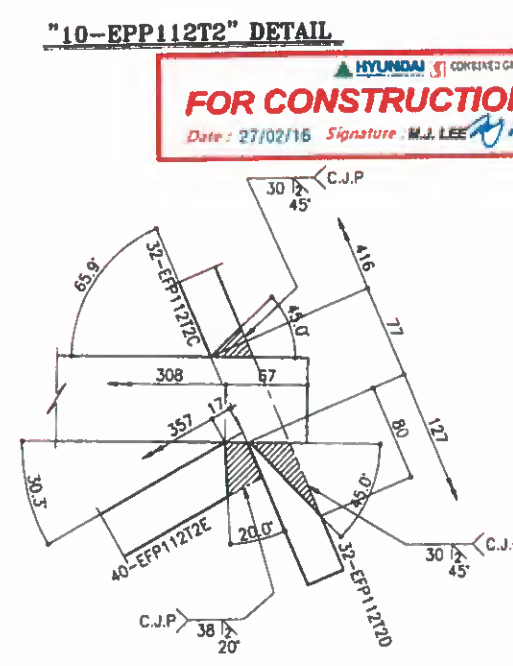
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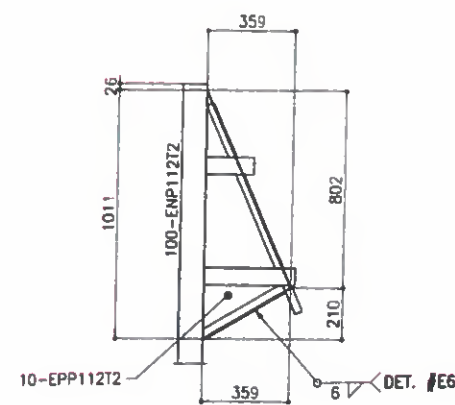
DET. #E2



DET. #E3



DET. #E4



DET. #E6

"10-EPP112T2" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

EDGE FLANGE (EF)

HOLD

NOTES

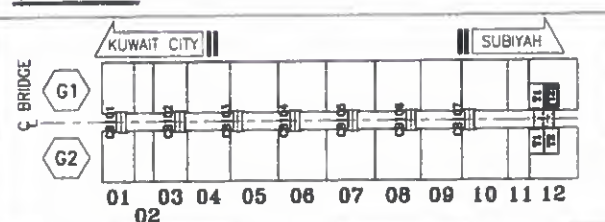
1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, C= 15 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON

KEY-PLAN



ONE - STEEL DECK - G112T2

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK

STEEL DECK DETAIL "G112T2" (5)

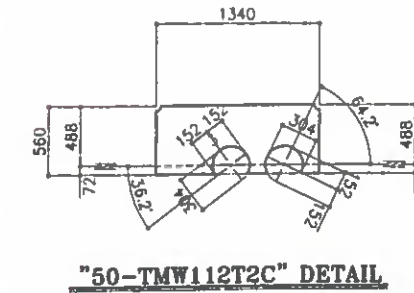
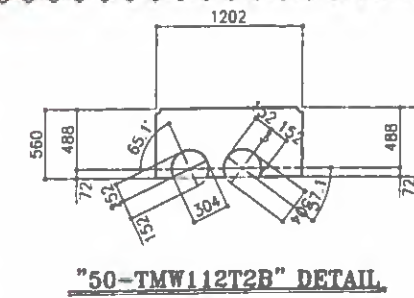
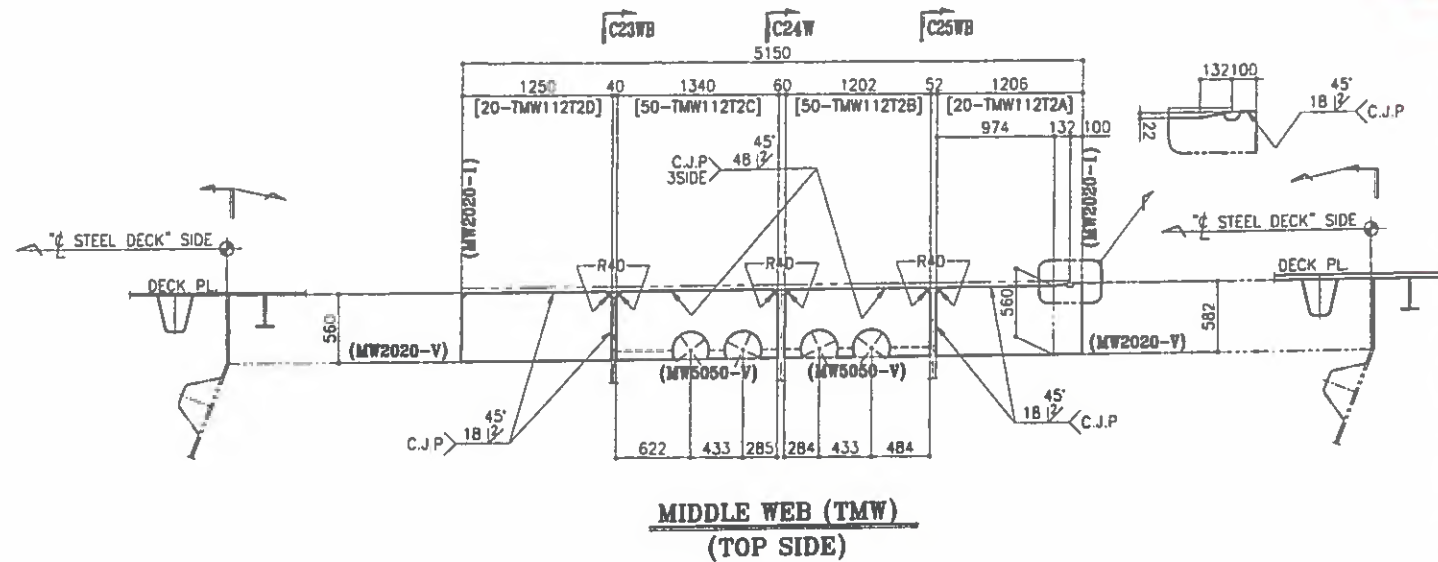
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHON	S.S.SON	S.M.KHON

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group

DRAWING NO.
RA140-22-BRG-SD-D-112T2e

REV.
A

Refer To Comments
on DW. SD-D-112T1f-A

















FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE 

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 16 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-236
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-114
USC31 ~ USC40	SD-STD-121-125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-149
ISC01 ~ ISC10	SD-STD-181-184
SPUCE	SD-STD-301-305
DS01, DS02	SD-STD-401-403

A	2018.02.25	FOR APPROVAL	H. PARK	S. S. S. S.	S. S. S. S.
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

STEEL DECK DETAIL "G112T2" (6)

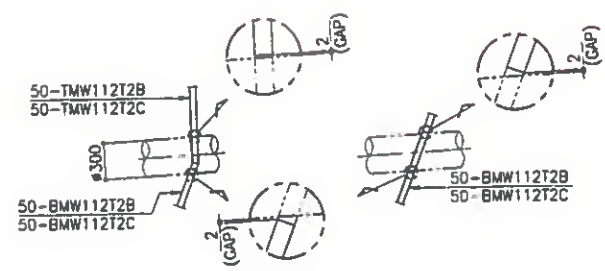
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KIM
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

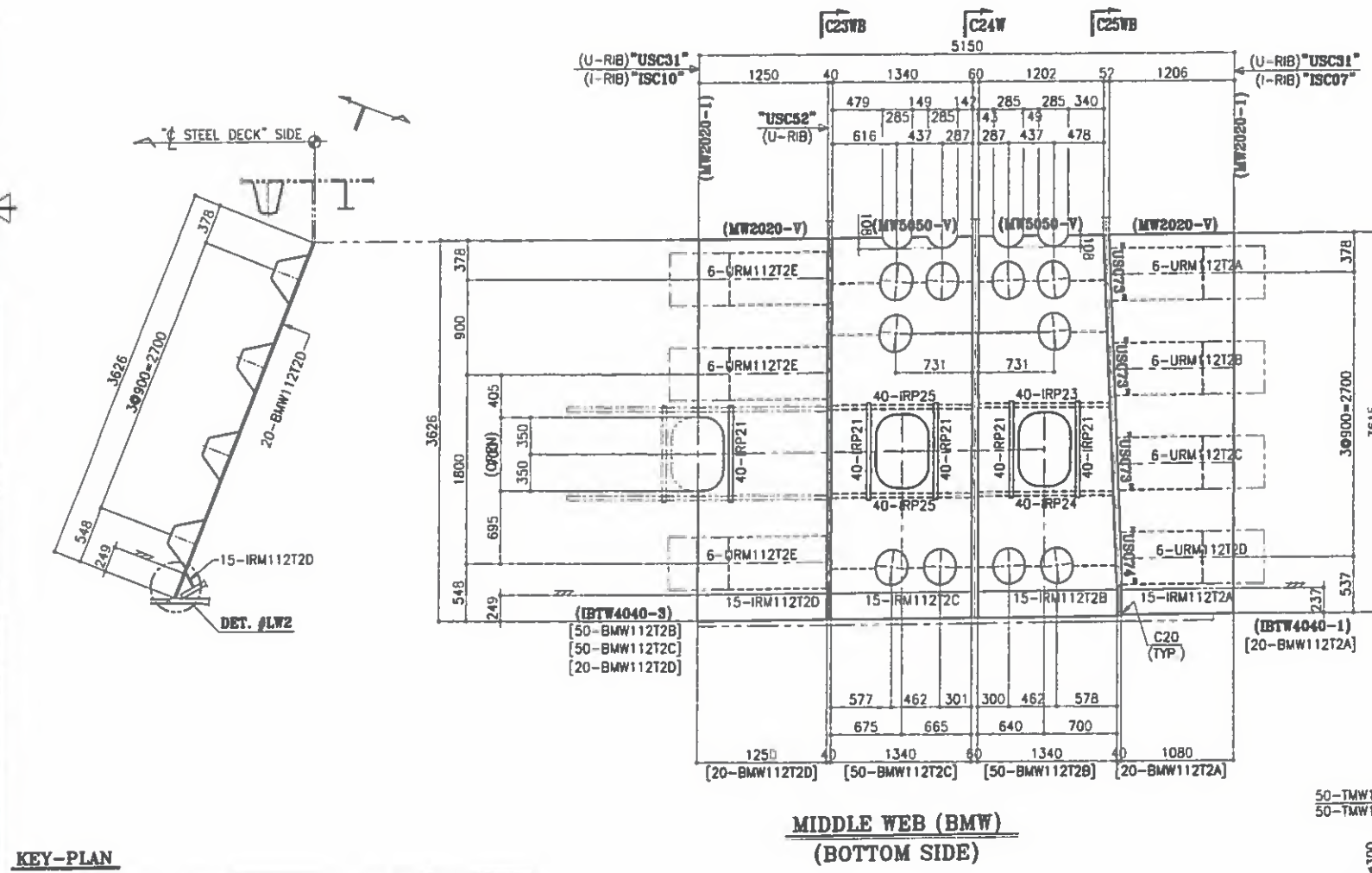
 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Controlling Company

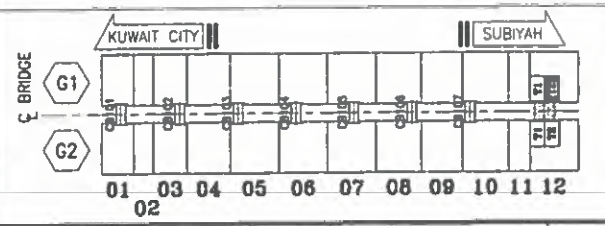
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RA140-22-BRG-SD-D-112T2f	A



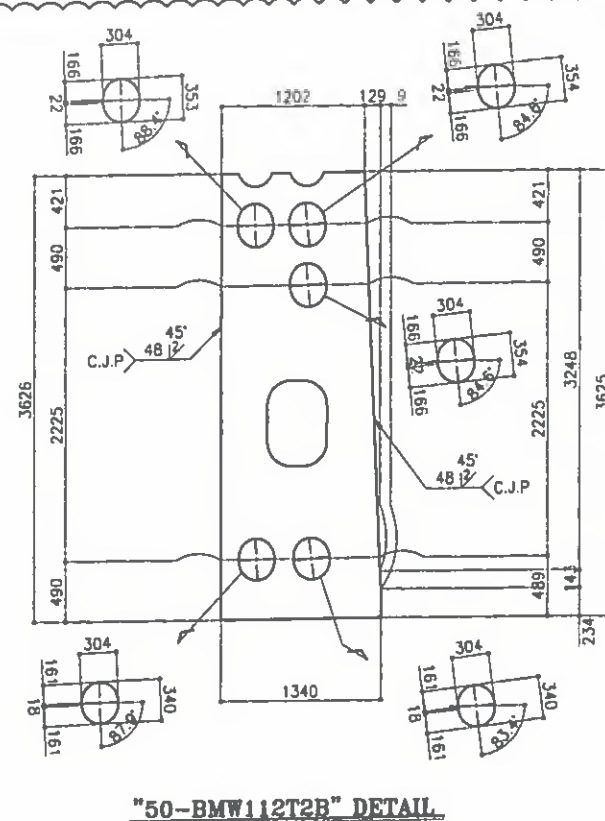
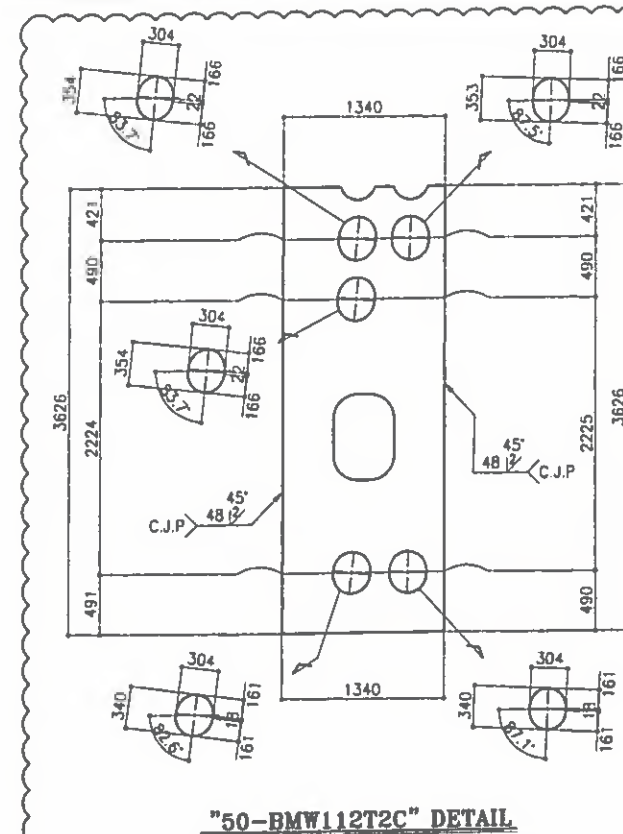
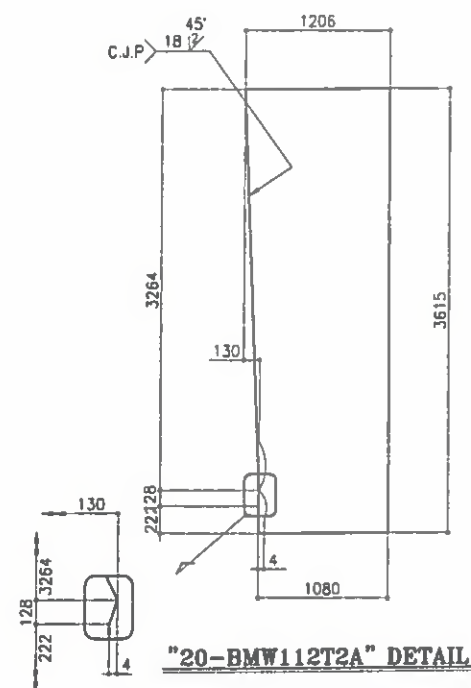
FOR
APPROVAL
2016.02.25
HYUNDAI E&SI
YOULCHON



KEY-PLAN



ONE - STEEL DECK - G112T2



HOLD

Refer To Comments
on Dnw. #
SD-D-112 Tig - A

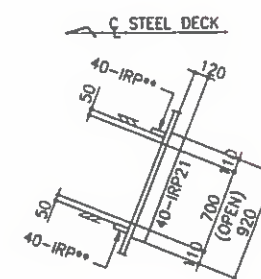
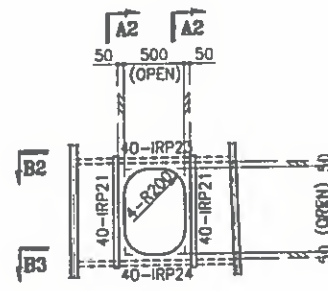
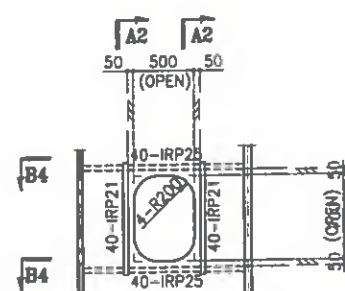
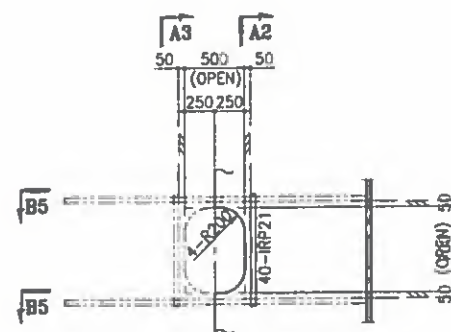
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

NOTES

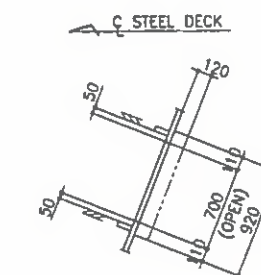
1. MATERIALS SEE D.D.M. UNLESS NOTED
2. SCALLOP R= 35 , D= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

■ REF. DRAWING

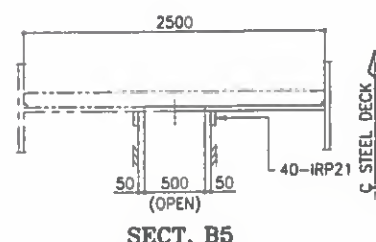
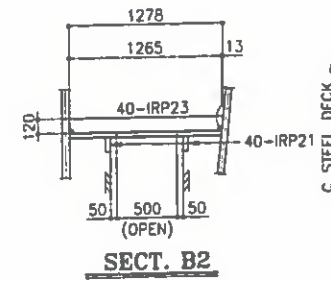
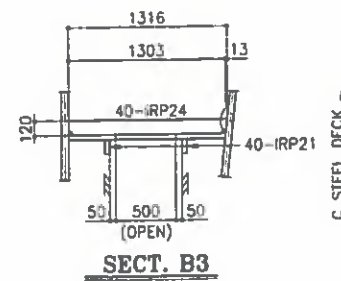
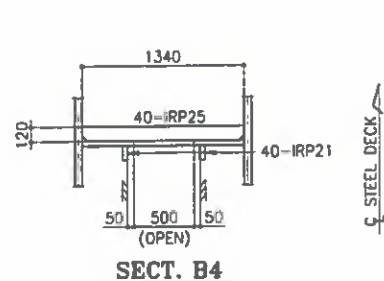
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-234
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-246
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-102
USC21 ~ USC29	SD-STD-111-112
USC31 ~ USC40	SD-STD-121-122
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-142
ISC01 ~ ISC10	SD-STD-181-182
SPLICE	SD-STD-301-302
DS01, DS02	SD-STD-401-402



SECT. A2



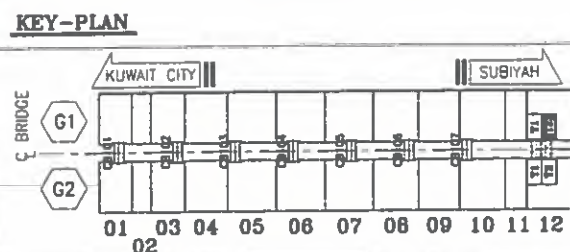
SECT. A3



"ACCESS HOLE" DETAIL

MIDDLE WEB (BMW)
(BOTTOM SIDE)

ONE - STEEL DECK - G112T2



FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

STEEL DECK DETAIL "G112T2" (7)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25




DRAWING NO.	REV
RA140-22-BRG-SD-D-112T2g	A

Refer To Comments on
Dnw.# SD-D-112T1h-A

HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=38, C=18, UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
------	------	-------------------------	-------	--------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

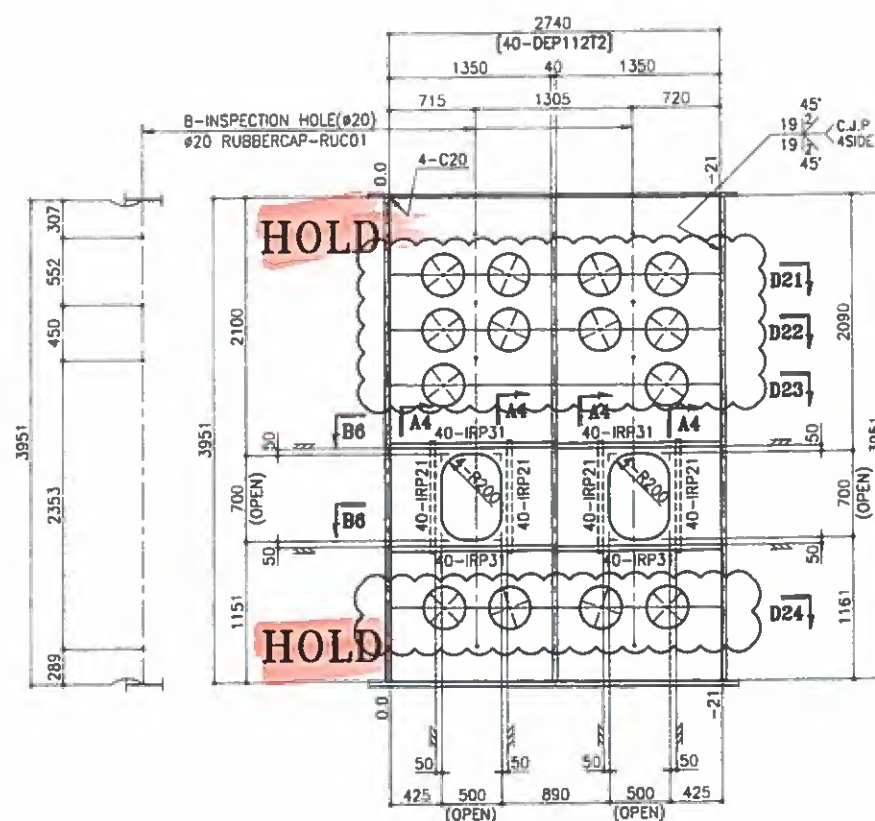
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T2" (8)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I. PARK	K.W. CHOI	S.S. SON	S.M. KHAN
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

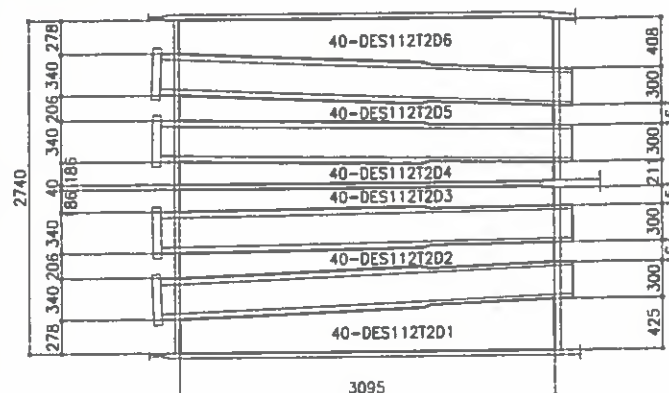
DRAWING NO.
RA140-22-BRG-SD-D-112T2h

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

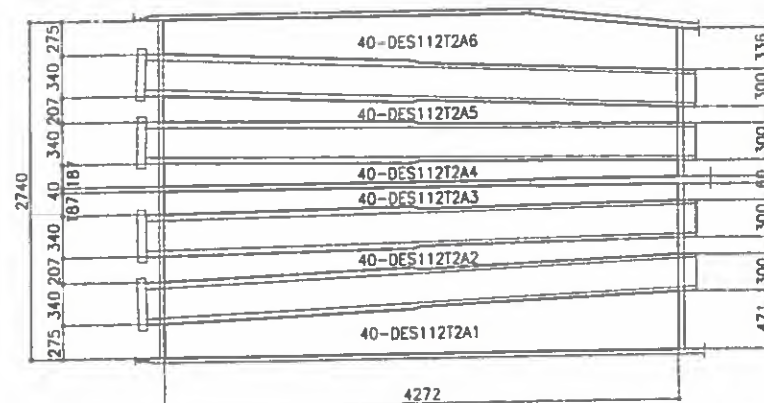


SECT. D1
"INSIDE END PLATE" DETAIL

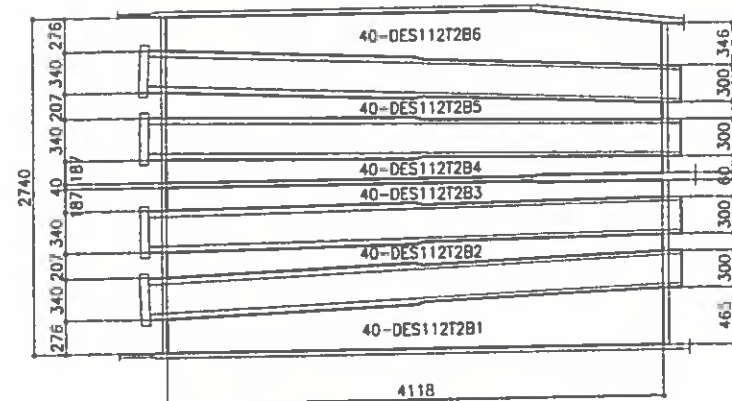
HOLD



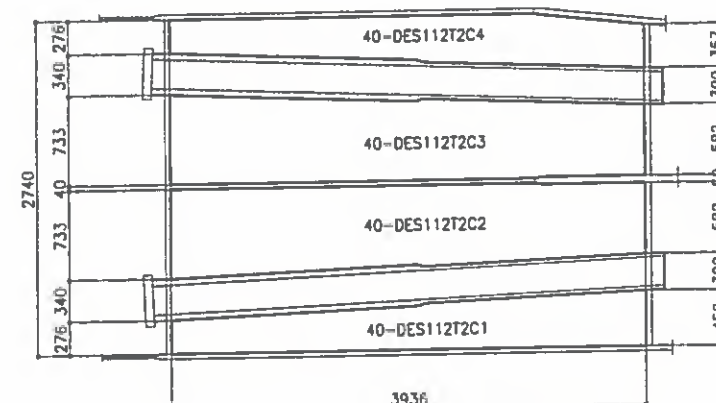
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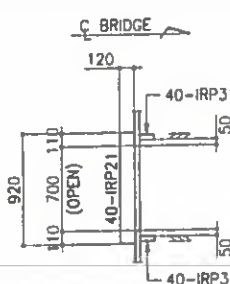
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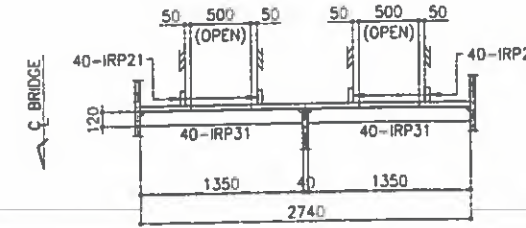
SECT. D22



SECT. D23

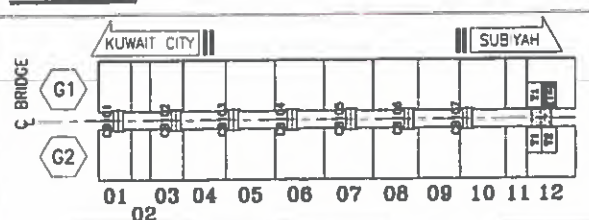


SECT. A4



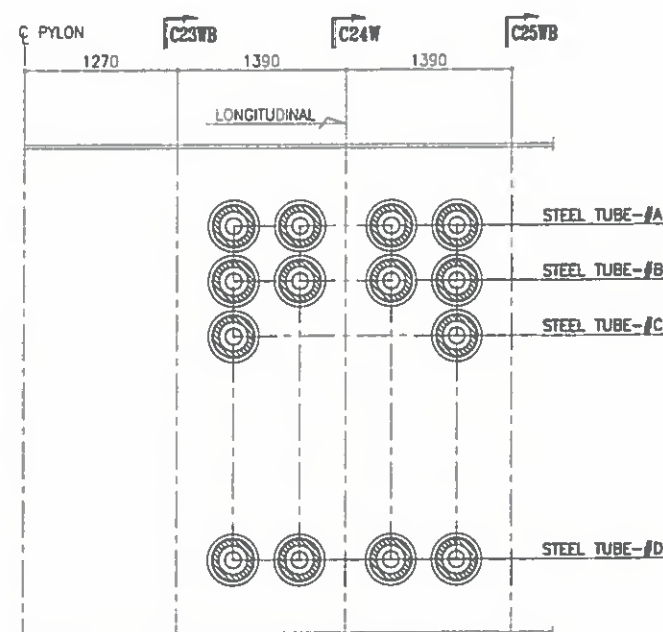
SECT. B6

KEY-PLAN

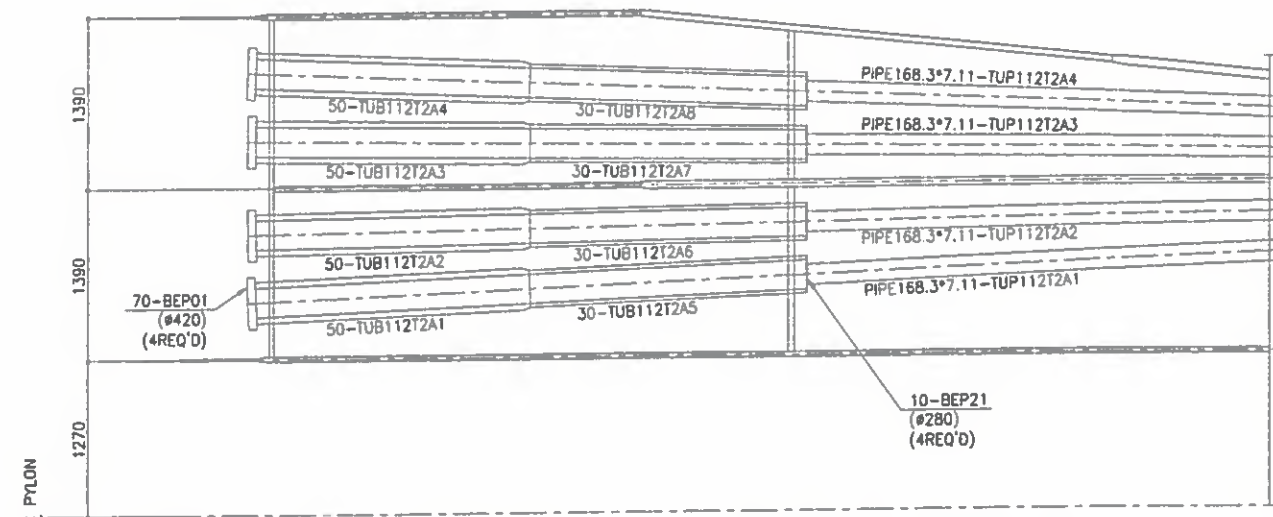


ONE - STEEL DECK - G112T2

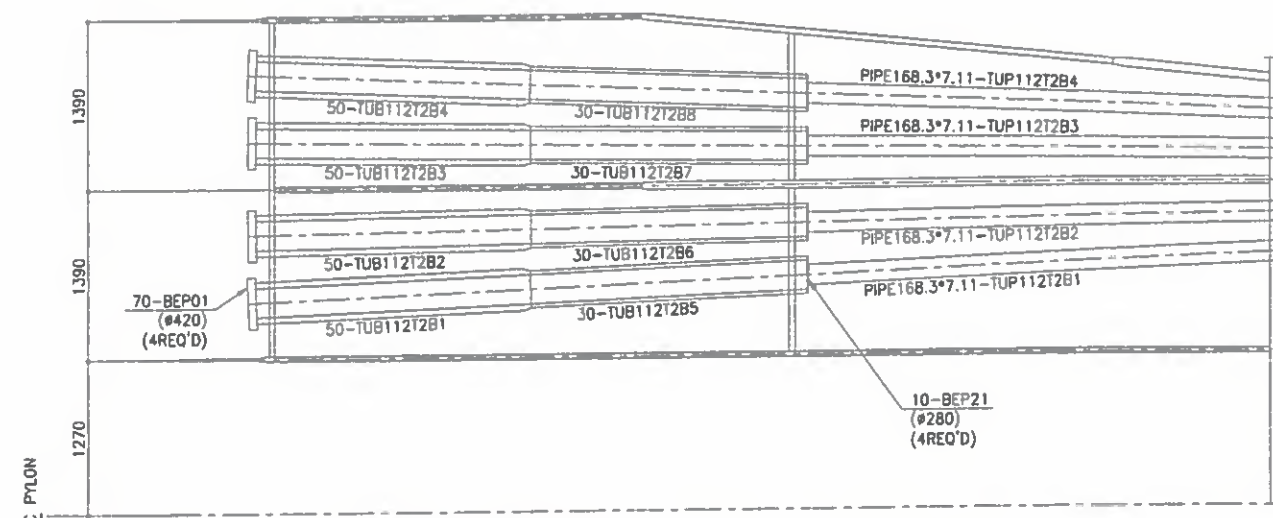
HOLD



STEEL TUBE ARRANGEMENT

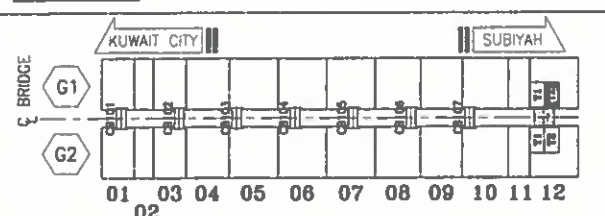


"STEEL TUBE-#A" DETAIL



"STEEL TUBE-#B" DETAIL

KEY-PLAN



ONE - STEEL DECK - G112T2

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 35, O= 15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.:
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S.M. KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T2" (10)

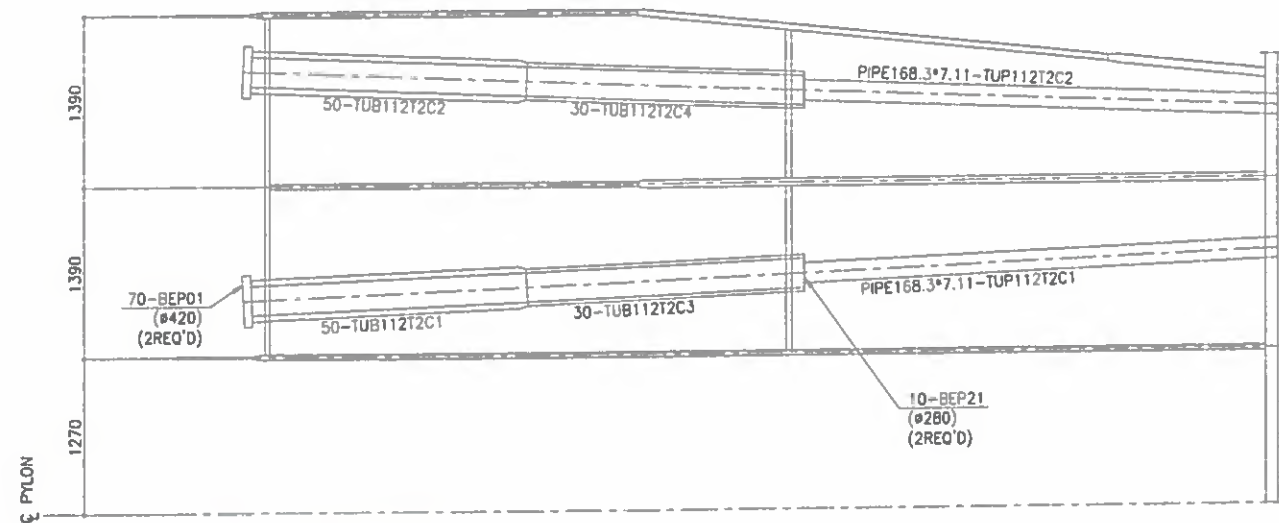
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.J. PARK	K.W. CHON	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S
YOULCHON

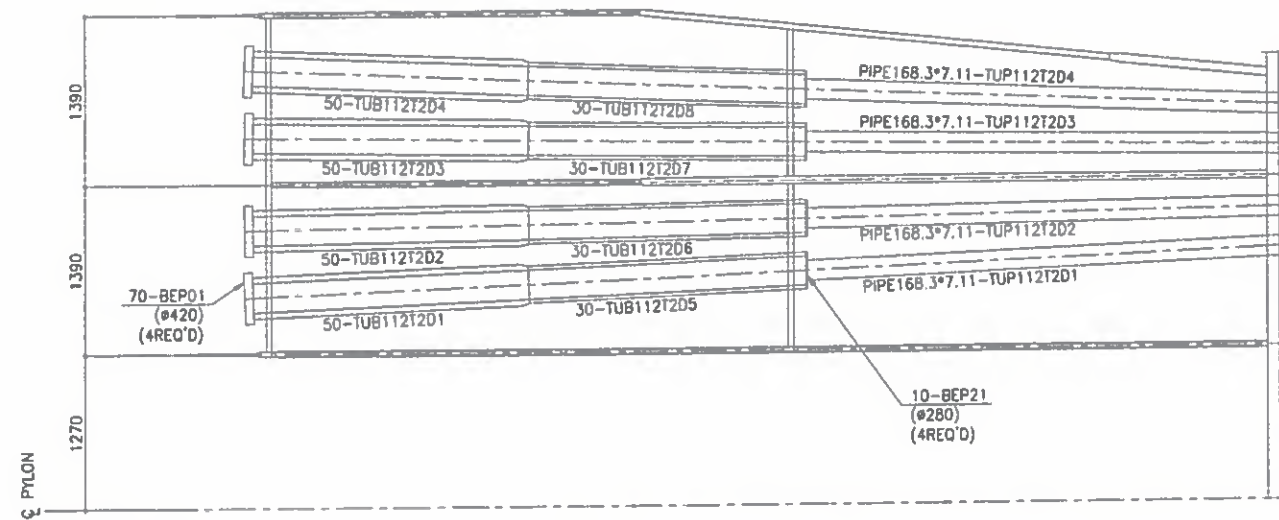
DRAWING NO
RA140-22-BRG-SD-D-112T2k

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HOLD

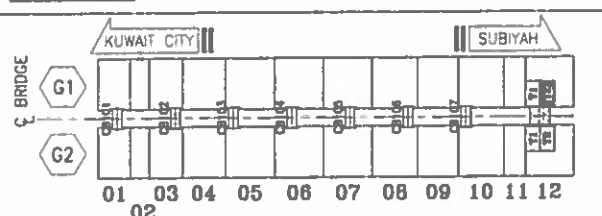


"STEEL TUBE-#C" DETAIL



"STEEL TUBE-#D" DETAIL

KEY-PLAN



ONE - STEEL DECK - G112T2



NOTES

1. MATERIALS SEE S.O.B. UNLESS NOTED
2. SCALLOP R= 30, D= 15 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G112T2" (11)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR



DRAWING NO.

RA140-22-BRG-SD-D-112T2m

REV.

A



UPPER FLANGE (FU)	LOWER FLANGE (FL)	INCLINED WEB (IW)	EDGE FLANGE (EF)	MIDDLE WEB (BMW)
			MIDDLE WEB (TMW)	

Diagram illustrating the cross-section of a composite beam, showing the following layers and dimensions:

- 5050
- DECK PLATE
- 100
- EDGE PLATE
- 5150
- MIDDLE WEB
- 200
- INCLINED WEB
- 4950
- 300
- BOTTOM FLG.
- 5250


FOR CONSTRUCTION
 Date : 27/02/16 Signature : M.J. LEE 

1. MATERIALS SEE 8.0.3. UNLESS NOTED
2. SCALLOP R= 36, C= 15 UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 OR C15 OR C20: FILL WITH WELD

MARK	REF. DWG. NO.:
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU* USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101, 107
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

A	2016.02.25	FOR APPROVAL	WJ PARK, JR.	S.S. SCHNEIDER	S. LUNDH	
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.	

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**


دولة الكويت
وزارة الأشغال العامة
إدارة الطرق العامة

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

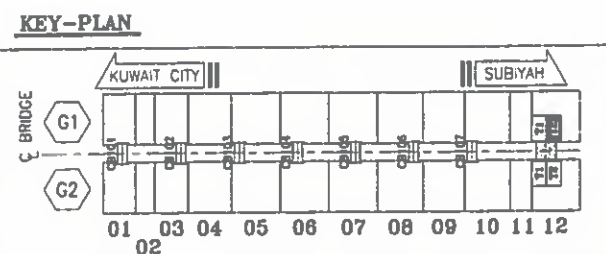
DRAWING TITLE

MAIN BRIDGE
STEEL DECK

STEEL DECK DETAIL "G112T2" (12)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25
CONTRACTOR				

 	
DRAWING NO.	REV.
RA140-22-BRG-SD-D-112T2n	A



ONE - STEEL DECK - G112T2

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

Refer To Comments on Draw
SD-D-112T1a-A

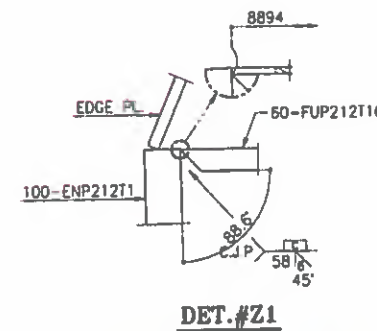
BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G212T1	<S> EEL DECK		ONE			
FUP212T1A	PL 24*193	5051	1	3990	A709M Gr.345	
FUP212T1B	PL 40*3135	5051	1	4972	A709M Gr.345	
FUP212T1C	PL 60*1566	5051	1	3726	A709M Gr.345	
URU212T1A	PL 8*744	4438	1	207	A709M Gr.345	
URU212T1B1	PL 8*732	668	5	154	A709M Gr.345	
URU212T1B2	PL 8*732	707	1	33	A709M Gr.345	
URU212T1B3	PL 8*699	770	1	34	A709M Gr.345	
URU212T1B4	PL 8*699	897	1	39	A709M Gr.345	
URU212T1B5	PL 8*699	960	1	42	A709M Gr.345	
URU212T1B6	PL 8*699	1024	1	43	A709M Gr.345	
URU212T1B7	PL 8*672	1077	1	45	A709M Gr.345	
URU212T1B8	PL 8*658	1140	1	47	A709M Gr.345	
URU212T1C1	PL 8*744	738	5	172	A709M Gr.345	
URU212T1C2	PL 8*744	700	1	33	A709M Gr.345	
URU212T1C3	PL 8*744	637	1	30	A709M Gr.345	
URU212T1C4	PL 8*744	510	1	24	A709M Gr.345	
URU212T1C5	PL 8*744	447	1	21	A709M Gr.345	
URU212T1C6	PL 8*744	535	1	25	A709M Gr.345	
URU212T1C7	PL 8*744	464	1	22	A709M Gr.345	
URU212T1C8	PL 8*726	472	1	22	A709M Gr.345	
URU212T1C9	PL 8*726	464	1	21	A709M Gr.345	
URU212T1D1	PL 8*744	738	5	172	A709M Gr.345	
URU212T1D2	PL 8*744	728	5	170	A709M Gr.345	
URU212T1D3	PL 8*726	728	1	33	A709M Gr.345	
URU212T1E1	PL 8*744	938	11	482	A709M Gr.345	
URU212T1E2	PL 8*726	938	1	43	A709M Gr.345	
URU212T1F1	PL 10*654	397	1	20	A709M Gr.345	
URU212T1F2	PL 10*654	464	1	24	A709M Gr.345	
URU212T1F3	PL 10*654	728	1	37	A709M Gr.345	
TRW212T1A	PL 15*192	1486	1	34	A709M Gr.345	
TRW212T1B	PL 15*150	802	1	14	A709M Gr.345	
TRW212T1C	PL 15*150	1340	1	24	A709M Gr.345	
TRW212T1D	PL 15*150	1250	1	22	A709M Gr.345	
TRW212T1A	PL 14*272	1139	1	34	A709M Gr.345	
TRW212T1B	PL 14*250	1170	1	32	A709M Gr.345	
TRW212T1C	PL 14*250	1340	1	37	A709M Gr.345	
TRW212T1D	PL 14*250	1250	1	34	A709M Gr.345	
TRF212T1A	PL 14*150	1143	1	19	A709M Gr.345	
TRF212T1B	PL 14*150	1182	1	19	A709M Gr.345	
TRF212T1C	PL 14*150	1340	1	22	A709M Gr.345	
TRF212T1D	PL 14*150	1250	1	21	A709M Gr.345	
CEP01	PL 12*55	110	1	1	A709M Gr.345	
FUP212T1A	PL 40*3080	5251	1	5078	A709M Gr.345	
FUP212T1B	PL 50*4071	5262	1	8408	A709M Gr.345	
URU212T1A	PL 6*756	868	3	93	A709M Gr.345	
URU212T1B	PL 6*756	738	6	158	A709M Gr.345	
URU212T1C	PL 6*756	938	3	100	A709M Gr.345	
BRW212T1A	PL 14*200	4287	1	94	A709M Gr.345	
BRF212T1A	PL 14*120	4187	1	55	A709M Gr.345	
CEP01	PL 12*55	110	1	1	A709M Gr.345	

<NEXT PAGE>

TABLE [U-RIB]

MARK	THK.	QTY	TYPE	CONNECTION	
				LEFT	RIGHT
URU212T1A	8	1	USU1	USC07	USC01
URU212T1B1	8	5	USU2	USC02	USC60
URU212T1B2	8	1	USU2	USC02	USC61
URU212T1B3	8	1	USU3	USC03	USC62
URU212T1B4	8	1	USU3	USC03	USC62
URU212T1B5	8	1	USU3	USC03	USC62
URU212T1B6	8	1	USU3	USC03	USC62
URU212T1B7	8	1	USU4	USC05	USC64
URU212T1B8	8	1	USU5	USC04	USC66
URU212T1C1	8	5	USU1	USC08	USC08
URU212T1C2	8	1	USU1	USC09	USC08
URU212T1C3	8	1	USU1	USC09	USC08
URU212T1C4	8	1	USU1	USC09	USC08
URU212T1C5	8	1	USU1	USC09	USC08
URU212T1C6	8	1	USU1	USC63	USC67
URU212T1C7	8	1	USU1	USC67	USC51
URU212T1C8	8	1	USU6	USC65	USC68
URU212T1C9	8	1	USU6	USC68	USC69
URU212T1D1	8	5	USU1	USC08	USC08
URU212T1D2	8	5	USU1	USC08	USC08
URU212T1D3	8	1	USU6	USC10	USC11
URU212T1E1	8	11	USU1	USC51	USC01
URU212T1E2	8	1	USU6	USC69	USC13
URU212T1F1	10	1	USU7	USC70	USC72
URU212T1F2	10	1	USU7	USC72	USC71
URU212T1F3	10	1	USU7	USC12	USC12



DET.#Z1

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.B. UNLESS NOTED
2. SCALLOP R= 25, O= 15, UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

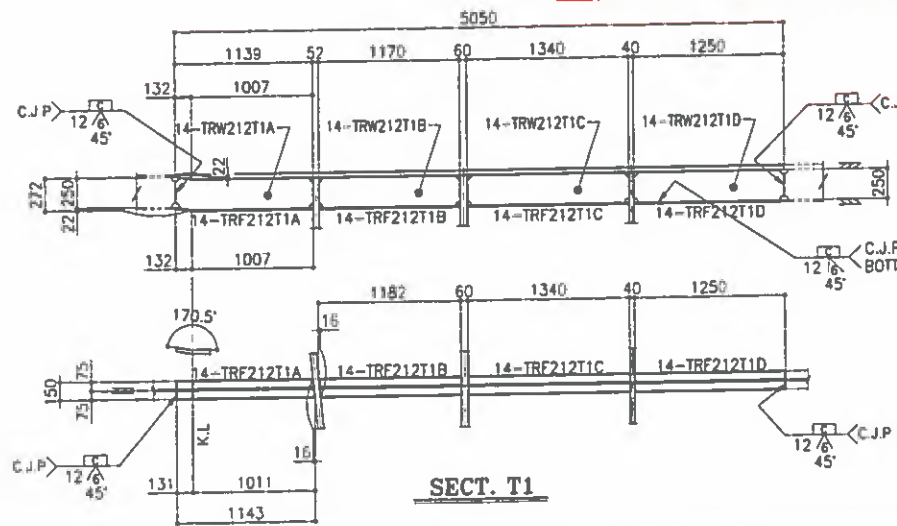
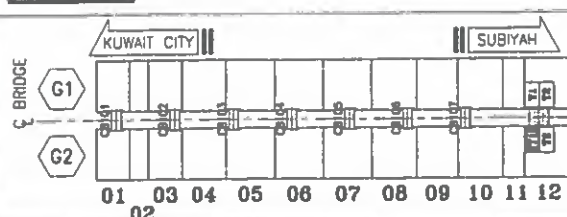
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

ONE - STEEL DECK - G212T1

UPPER FLANGE (FU)

- U-RIB INITIAL: URU
- U-RIB THICKNESS: 8t (U.N.O)

KEY-PLAN



SECT. T1

Refer To Comments on Draw. SD-D-112T1b-A

- NOTES**
1. MATERIALS SEE B.O.M. UNLESS NOTED
 2. SCALLOP R=35, 0.15 UNLESS NOTED
 3. ALL FILLET WELD: $\frac{1}{4}$ UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15: FILL WITH WELD

REF. DRAWING

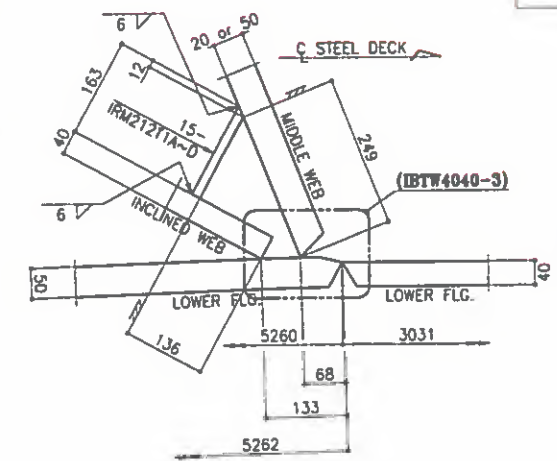
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G212T1	<STEEL DECK>	ONE				
NP212T1A	PL 40*2813	1224	1	1081	A709M Gr.345	
NP212T1B	PL 40*3225	1423	1	1441	A709M Gr.345	
NP212T1C	PL 40*2716	1350	1	1151	A709M Gr.345	
NP212T1D	PL 40*3225	1097	1	1111	A709M Gr.345	
NP212T1E	PL 40*2716	1350	1	1151	A709M Gr.345	
NP212T1F	PL 40*3225	1351	1	1368	A709M Gr.345	
NP212T1G	PL 40*2716	1260	1	1075	A709M Gr.345	
NP212T1H	PL 40*3225	1261	1	1277	A709M Gr.345	
UR212T1A1	PL 6*756	713	1	25	A709M Gr.345	
UR212T1A2	PL 6*756	798	1	28	A709M Gr.345	
UR212T1A3	PL 6*756	884	1	31	A709M Gr.345	
UR212T1A4	PL 6*756	967	1	34	A709M Gr.345	
UR212T1A5	PL 6*756	1045	1	37	A709M Gr.345	
UR212T1B1	PL 6*756	602	1	21	A709M Gr.345	
UR212T1B2	PL 6*756	431	1	15	A709M Gr.345	
UR212T1B3	PL 6*756	499	1	18	A709M Gr.345	
UR212T1B4	PL 6*756	470	1	17	A709M Gr.345	
UR212T1C	PL 6*756	728	3	78	A709M Gr.345	
UR212T1D	PL 6*756	938	4	134	A709M Gr.345	
UR212T1A	PL 15*163	579	1	11	A709M Gr.345	
UR212T1B	PL 15*163	1325	1	25	A709M Gr.345	
UR212T1C	PL 15*163	1340	1	26	A709M Gr.345	
UR212T1D	PL 15*163	944	1	18	A709M Gr.345	
UR212T1E	PL 15*372	1260	1	55	A709M Gr.345	
UR212T1F	PL 15*372	1340	1	59	A709M Gr.345	
UR212T1G	PL 15*372	944	1	41	A709M Gr.345	
UR212T1H	PL 15*150	930	1	16	A709M Gr.345	
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP22	PL 40*120	720	6	163	A709M Gr.345	
CEP01	PL 12*55	110	1	1	A709M Gr.345	
EP212T1A	PL 32*298	5052	1	378	A709M Gr.345	
EP212T1B	PL 32*228	1403	1	80	A709M Gr.345	
EP212T1C	PL 32*416	1404	1	147	A709M Gr.345	
EP212T1D	PL 32*127	1402	1	45	A709M Gr.345	
EP212T1E	PL 40*357	1402	1	157	A709M Gr.345	
EP212T1	PL 10*359	1011	1	28	A709M Gr.345	
TW212T1A	PL 20*582	1210	1	111	A709M Gr.345	
TW212T1B	PL 50*560	1206	1	285	A709M Gr.345	
TW212T1C	PL 50*560	1344	1	295	A709M Gr.345	
TW212T1D	PL 20*560	1254	1	110	A709M Gr.345	
BMW212T1A	PL 20*3815	1231	1	699	A709M Gr.345	
BMW212T1B	PL 50*3626	1365	1	1943	A709M Gr.345	
BMW212T1C	PL 50*3626	1365	1	1943	A709M Gr.345	
BMW212T1D	PL 20*3626	1275	1	726	A709M Gr.345	
URM212T1A	PL 6*756	893	1	32	A709M Gr.345	
URM212T1B	PL 6*756	857	1	31	A709M Gr.345	
URM212T1C	PL 6*756	821	1	29	A709M Gr.345	
URM212T1D	PL 6*756	785	1	28	A709M Gr.345	
URM212T1E	PL 6*756	938	3	100	A709M Gr.345	

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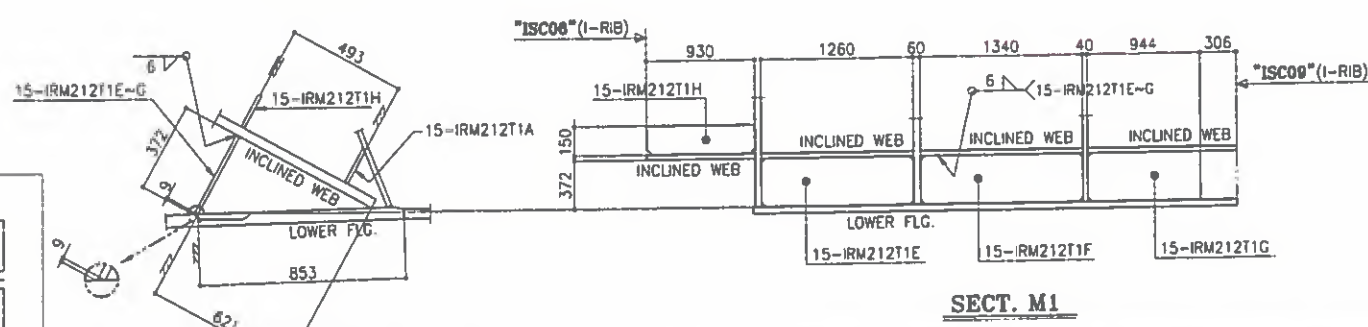


DET. #LW2

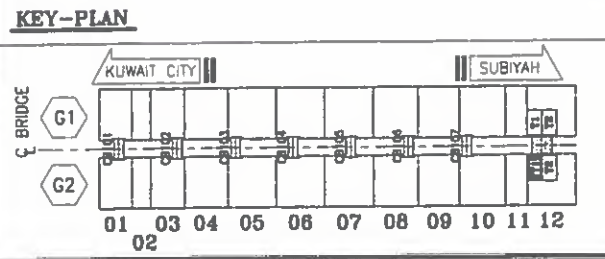
A 2016.02.25 FOR APPROVAL		H.I.PARK		S.S.SON	S.M.KHON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
EMPLOYER					
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION					
PROJECT TITLE					
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140					
DRAWING TITLE					
MAIN BRIDGE STEEL DECK STEEL DECK DETAIL "G212T1" (2)					
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED	
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON	
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25	
CONTRACTOR					
HYUNDAI E&S YOUNGCHON					
DRAWING NO.					
RA140-22-BRG-SD-D-212T1b					
REV					
A					

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOUNGCHON

ONE - STEEL DECK - G212T1



SECT. M1



KEY-PLAN

Refer To comments on DWG.
SD-D-112T1c-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G212T1	<STEEL DECK>	ONE				
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP23	PL 40*120	1278	1	48	A709M Gr.345	
IRP24	PL 40*120	1316	1	50	A709M Gr.345	
IRP25	PL 40*120	1340	2	101	A709M Gr.345	
IRP26	PL 40*120	2500	2	188	A709M Gr.345	
DEP212T1	PL 40*3972	2740	1	3417	A709M Gr.345	
DES212T1A1	PL 40*471	4272	1	632	A709M Gr.345	
DES212T1A2	PL 40*207	4272	1	278	A709M Gr.345	
DES212T1A3	PL 40*187	4272	1	251	A709M Gr.345	
DES212T1A4	PL 40*187	4272	1	251	A709M Gr.345	
DES212T1A5	PL 40*207	4272	1	278	A709M Gr.345	
DES212T1A6	PL 40*336	4272	1	451	A709M Gr.345	
DES212T1B1	PL 40*465	4118	1	601	A709M Gr.345	
DES212T1B2	PL 40*207	4118	1	268	A709M Gr.345	
DES212T1B3	PL 40*187	4118	1	242	A709M Gr.345	
DES212T1B4	PL 40*187	4118	1	242	A709M Gr.345	
DES212T1B5	PL 40*207	4118	1	268	A709M Gr.345	
DES212T1B6	PL 40*346	4118	1	447	A709M Gr.345	
DES212T1C1	PL 40*458	3936	1	566	A709M Gr.345	
DES212T1C2	PL 40*733	3936	1	906	A709M Gr.345	
DES212T1C3	PL 40*733	3936	1	906	A709M Gr.345	
DES212T1C4	PL 40*357	3936	1	441	A709M Gr.345	
DES212T1D1	PL 40*425	3095	1	413	A709M Gr.345	
DES212T1D2	PL 40*206	3095	1	200	A709M Gr.345	
DES212T1D3	PL 40*186	3095	1	181	A709M Gr.345	
DES212T1D4	PL 40*186	3095	1	181	A709M Gr.345	
DES212T1D5	PL 40*206	3095	1	200	A709M Gr.345	
DES212T1D6	PL 40*408	3095	1	397	A709M Gr.345	
IRP21	PL 40*120	920	4	139	A709M Gr.345	
IRP31	PL 40*120	1350	4	203	A709M Gr.345	
RUC01	RUBBERCAP D20	-	8		RUBBER	
ENP212T1	PL 100*4150	5080	1	16549	A709M Gr.345	
ENS212T1A	PL 70*200	1400	1	154	A709M Gr.345	
ENS212T1B	PL 70*380	1400	1	292	A709M Gr.345	
ENS212T1C	PL 80*250	3780	5	2967	A709M Gr.345	
ENS212T1D	PL 80*200	339	28	1192	A709M Gr.345	
ENS212T1E	PL 80*200	230	7	202	A709M Gr.345	
ENS212T1F	PL 80*200	250	7	220	A709M Gr.345	
TUB212T1A1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1A2	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1A3	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1A4	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1A5	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T1A6	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T1A7	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T1A8	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T1B1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1B2	PL 50*911	2280	1	815	A709M Gr.345	

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HOLD

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REF. DRAWING

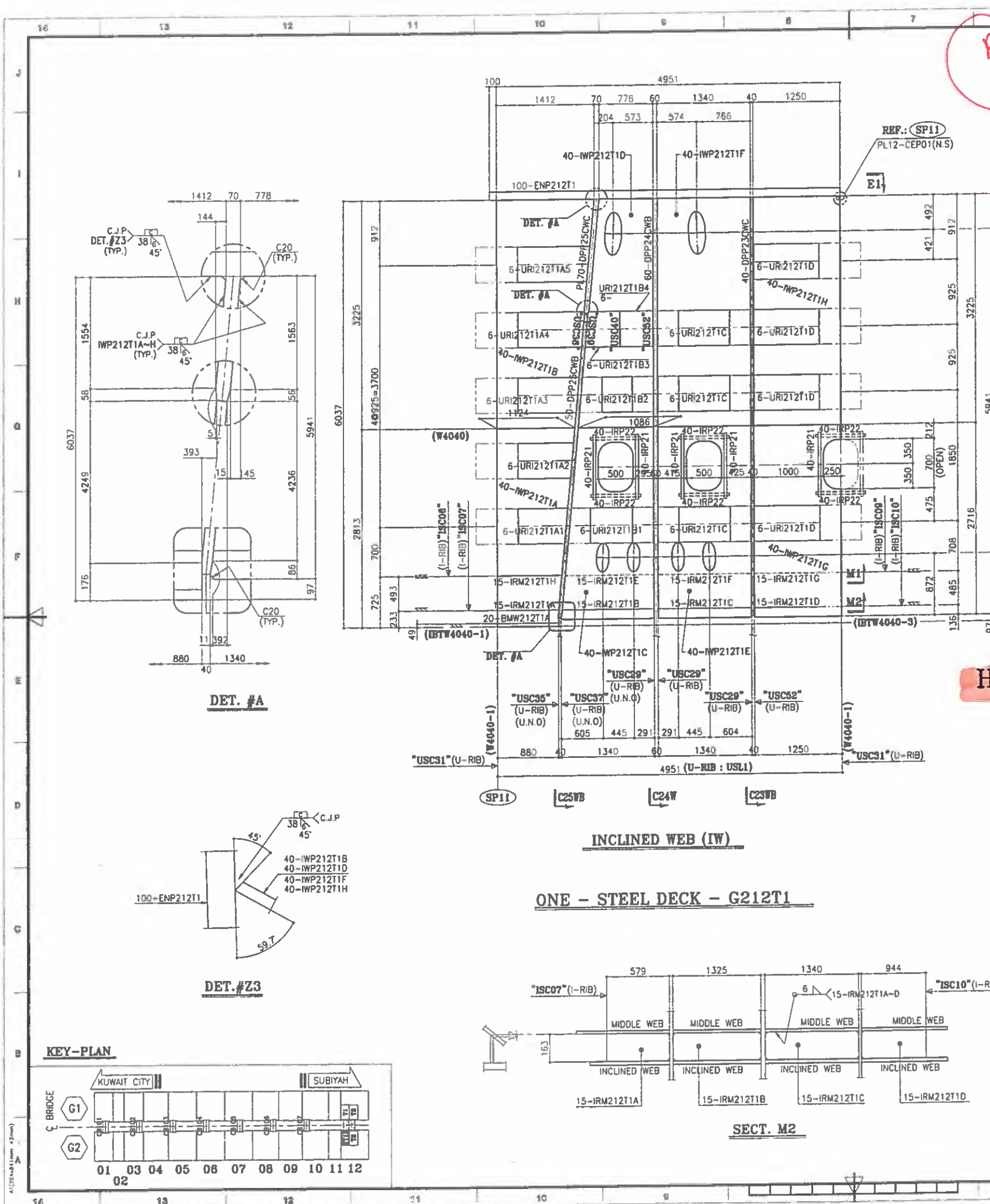
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLUP R=30, > 15 mm UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

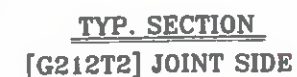
A 2016.02.25 FOR APPROVAL		H.I.PARK S.S.SON S.M.KHON	
REV	DATE	DESCRIPTION OF REVISION	APPRO.
EMPLOYER			
STATE OF KUWAIT MINISTRY OF PUBLIC WORKS ROADS ADMINISTRATION			
PROJECT TITLE			
SHEIKH JABER AL AHMAD AL SABAH CAUSEWAY PROJECT (MAIN LINK) CONTRACT RA/140			
DRAWING TITLE			
MAIN BRIDGE STEEL DECK STEEL DECK DETAIL "G212T1" (3)			
SCALE	DRAWN	DESIGNED	CHECKED APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25
CONTRACTOR			
HYUNDAI E&S		Combined Group	
DRAWING NO.		REV.	
RA140-22-BRG-SD-D-212T1c		A	





• "40-IRP22" Weld sequence :
"G112T2" and After completion of assembly

"ACCESS HOLE" DETAIL



REF. DRAWING	
MARK	REF. DWG. NO ;
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

- ## NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , D= 15 UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS						
MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G212T1	<STEEL DECK>	-	ONE			
TUB212T1B3	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1B4	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1B5	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1B6	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1B7	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1B8	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1C1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1C2	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1C3	PL 30*848	2295	1	459	A709M Gr.345	
TUB212T1C4	PL 30*848	2295	1	459	A709M Gr.345	
TUB212T1D1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1D2	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1D3	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1D4	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T1D5	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1D6	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1D7	PL 30*848	2306	1	461	A709M Gr.345	
TUB212T1D8	PL 30*848	2306	1	461	A709M Gr.345	
TUP212T1A1	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1A2	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1A3	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1A4	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1B1	PIPE 0168.3*7.11	3936	1	111	ASTM A53	
TUP212T1B2	PIPE 0168.3*7.11	3936	1	111	ASTM A53	
TUP212T1B3	PIPE 0168.3*7.11	3936	1	111	ASTM A53	
TUP212T1B4	PIPE 0168.3*7.11	3936	1	111	ASTM A53	
TUP212T1C1	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1C2	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1D1	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1D2	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
TUP212T1D3	PIPE 0168.3*7.11	3926	1	111	ASTM A53	
TUP212T1D4	PIPE 0168.3*7.11	3925	1	111	ASTM A53	
BEPO1	PL 70*420	420	14	1357	A709M Gr.345	
BE2P1	PL 10*280	280	14	86	A709M Gr.345	
C23WB	<DIAPHRAGM>	-	1	11387		
C24W	<DIAPHRAGM>	-	1	15219		
C25WB	<DIAPHRAGM>	-	1	13638		
USC01	<U-RIB CONNECTION>	-	12	564		
USC08	<U-RIB CONNECTION>	-	34	544		
USC09	<U-RIB CONNECTION>	-	4	54		
USC10	<U-RIB CONNECTION>	-	1	16		
USC11	<U-RIB CONNECTION>	-	1	16		
USC12	<U-RIB CONNECTION>	-	2	34		
USC13	<U-RIB CONNECTION>	-	1	46		
USC21	<U-RIB CONNECTION>	-	3	141		
USC29	<U-RIB CONNECTION>	-	20	260		
USC31	<U-RIB CONNECTION>	-	7	329		
USC37	<U-RIB CONNECTION>	-	13	26		
USC40	<U-RIB CONNECTION>	-	1	2		
	<NEXT PAGE>					

A	2011.02.23	FOR APPROVAL	HJ PARK	S.S. SONG	S. MUNOZ
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK

STEEL DECK DETAIL "G212T1" (4

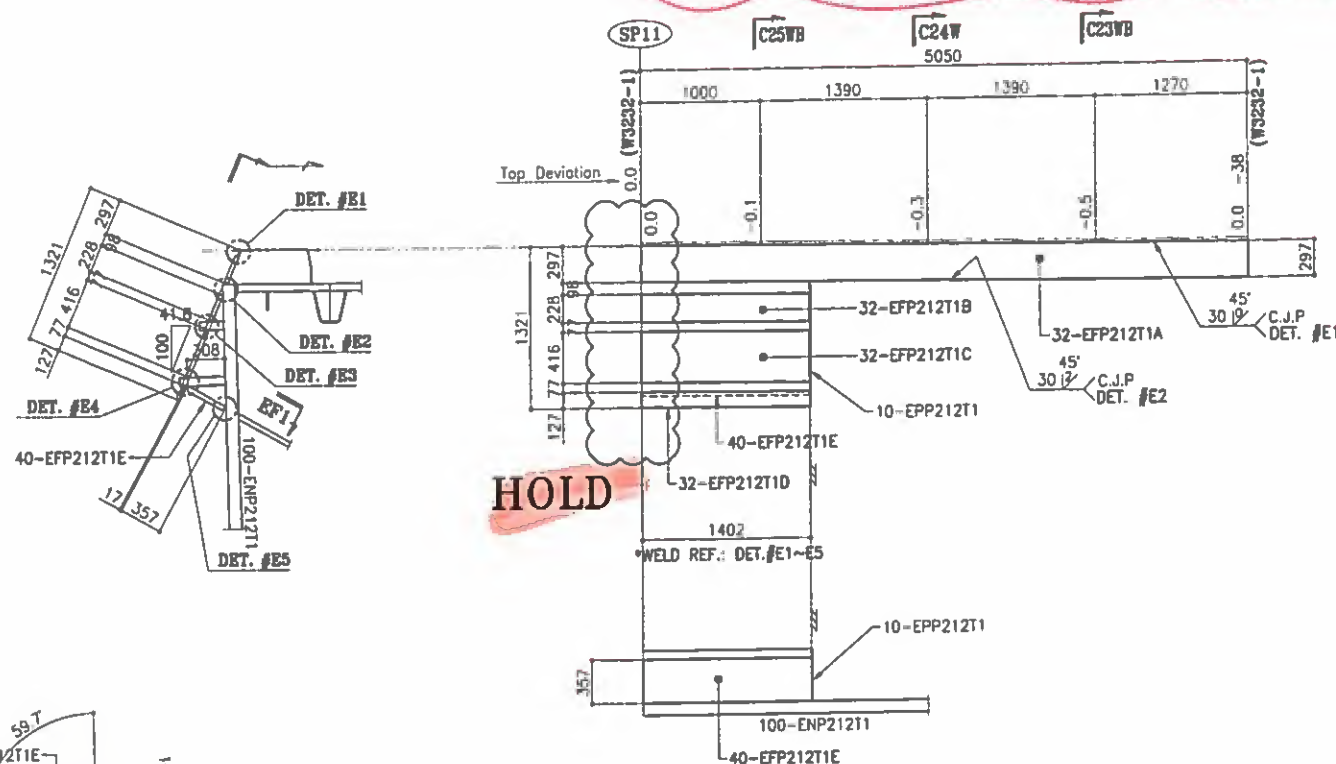
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NONE	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR	
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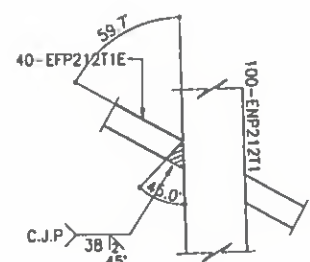
HYUNDAI
Engineering & Construction

DRAWING NO.	REV.
RA140-22-BRG-SD-D-212T1d	A

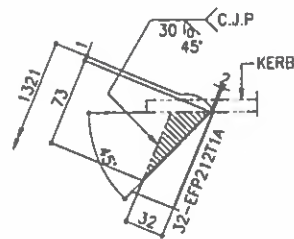
Refer To comments on DW. # SD-D-112T1E-A



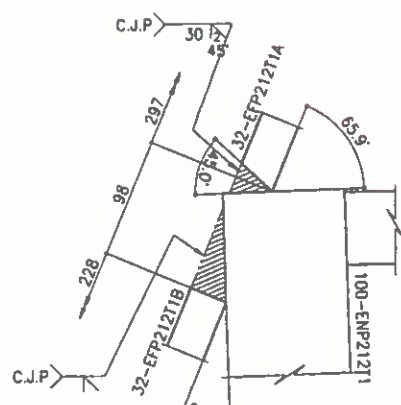
EDGE FLANGE (EF)



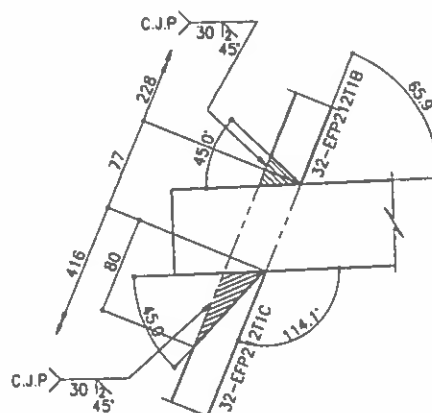
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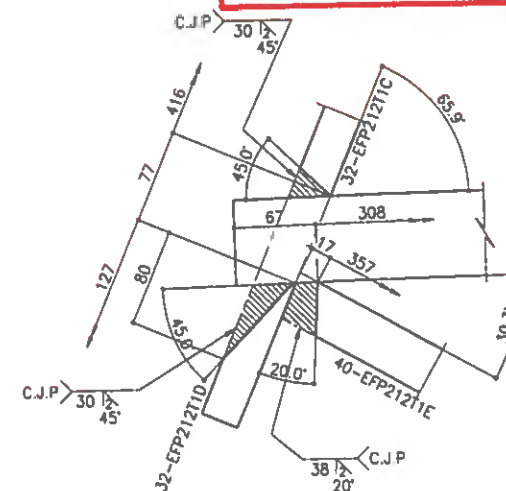
DET. #E1



DET. #E2



DET. #E3

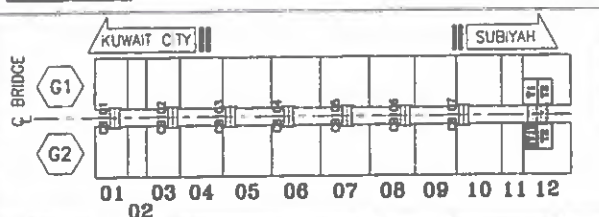


DET. #E4

"10-EPP212T1" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

KEY-PLAN



ONE - STEEL DECK - G212T1

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SLOPPED IN 35° OR 15° UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G212T1	<STEEL DECK>	-	ONE	-		
USC51	<U-RIB CONNECTION>	-	12	12		
USC52	<U-RIB CONNECTION>	-	14	14		
USC60	<U-RIB CONNECTION>	-	5	5		
USC67	<U-RIB CONNECTION>	-	1	1		
USC68	<U-RIB CONNECTION>	-	1	1		
USC69	<U-RIB CONNECTION>	-	2	2		
USC71	<U-RIB CONNECTION>	-	1	1		
USC72	<U-RIB CONNECTION>	-	1	1		
ISC09	<I-RIB CONNECTION>	-	1	28		
ISC10	<I-RIB CONNECTION>	-	1	12		

S.TOTAL = 144720

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

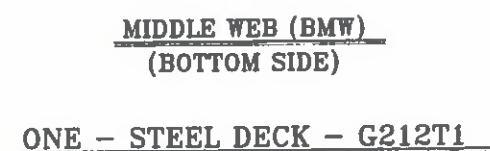
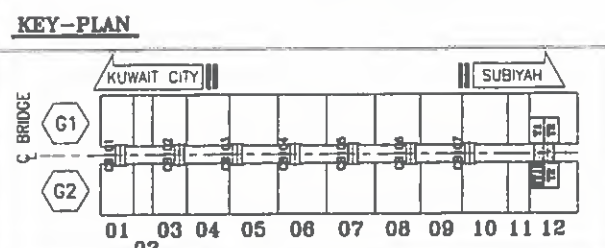
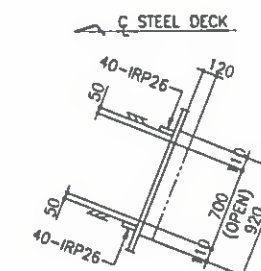
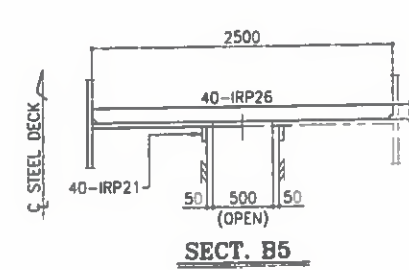
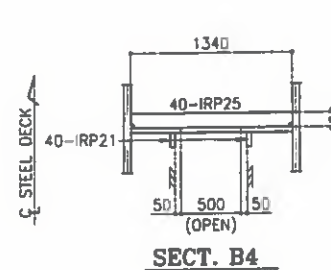
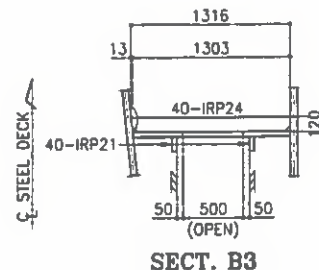
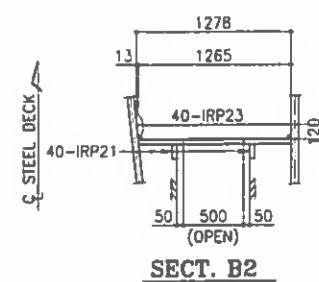
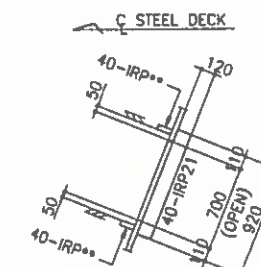
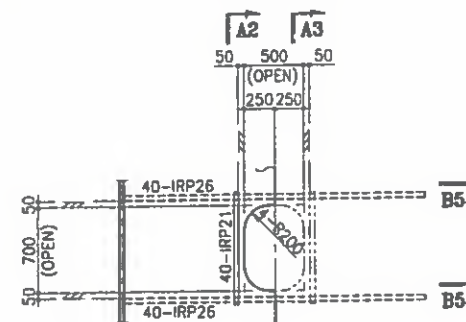
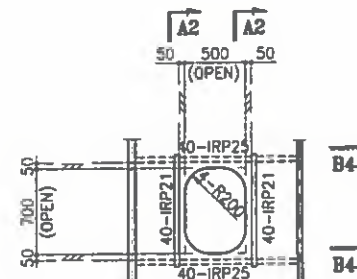
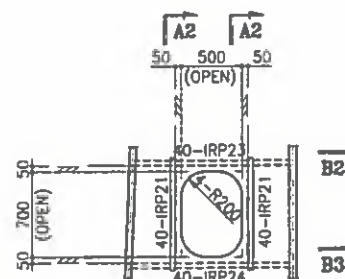
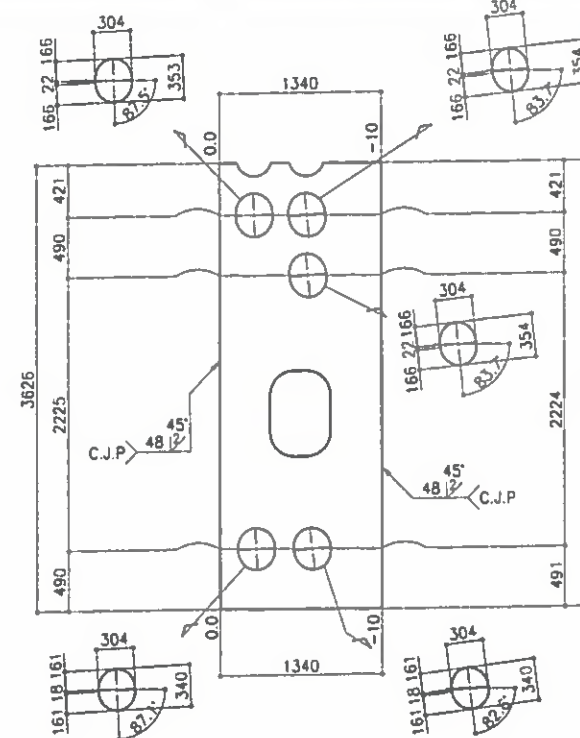
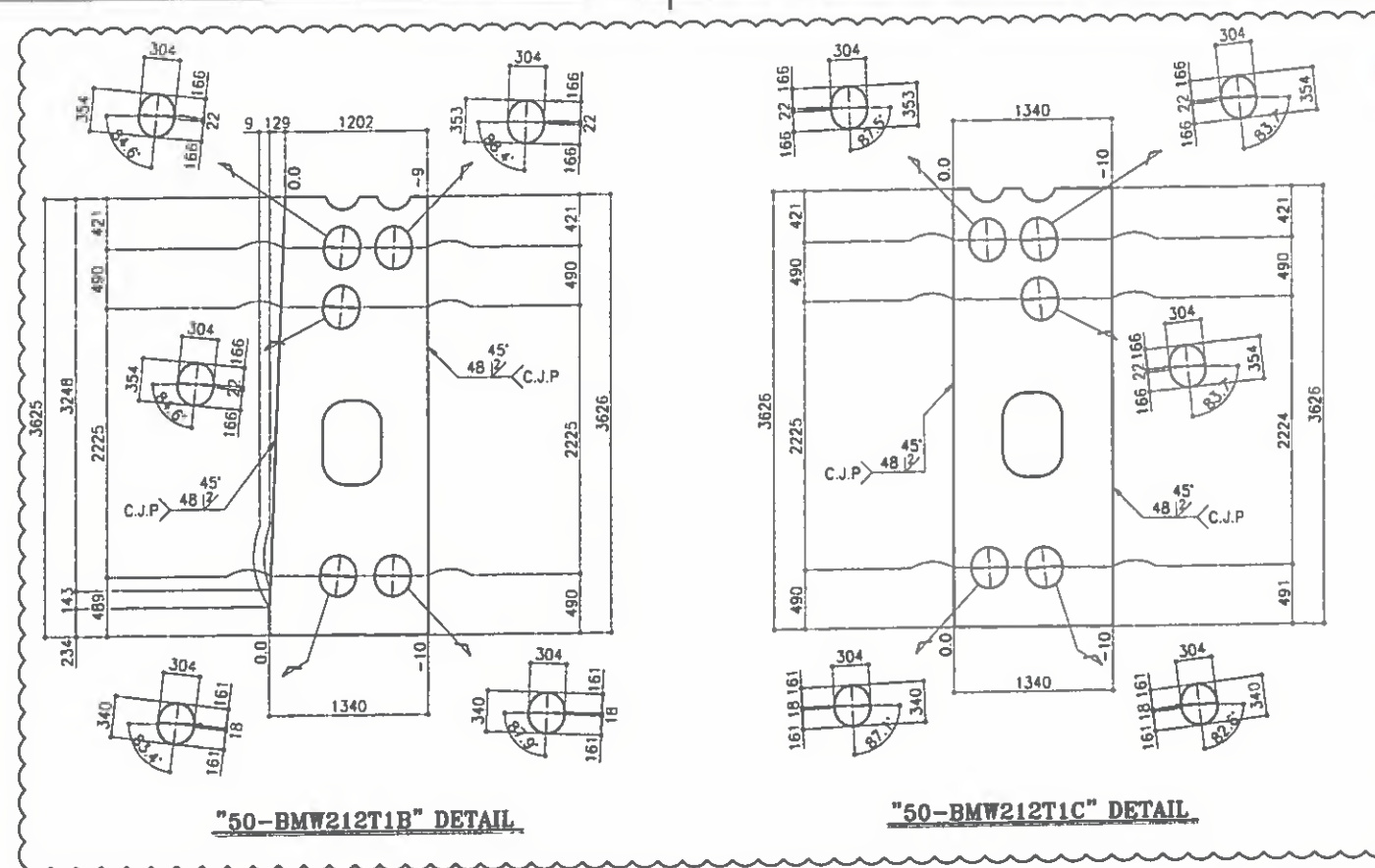
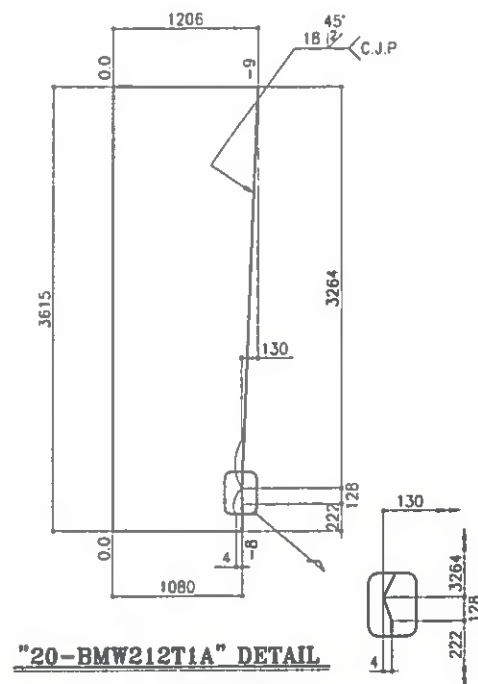
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T1" (5)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
-------	-------	----------	---------	----------

DATE ISSUED: 2016.02.25
CONTRACTOR: HYUNDAI E&S CONSTRUCTION

DRAWING NO. RA140-22-BRG-SD-D-212T1e

REV. A



HOLD Refer To comments
on Draw. #
SD-D-112 Tig-A

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE *[Signature]*

NOTES

1. MATERIALS SEE S.O.B. UNLESS NOTED
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING	
MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

A	2018.02.25	FOR APPROVAL	H. PARK	S. S. SONG	S. L. CHOI
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
EMPLOYER					

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

STEEL DECK DETAIL "G212T1" (7

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR

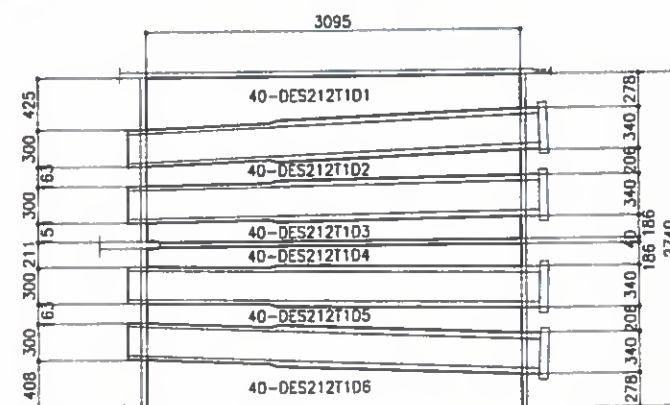
 **HYUNDAI**
ENGINEERING & CONSTRUCTION

 **Combined Group**
Constructing Company

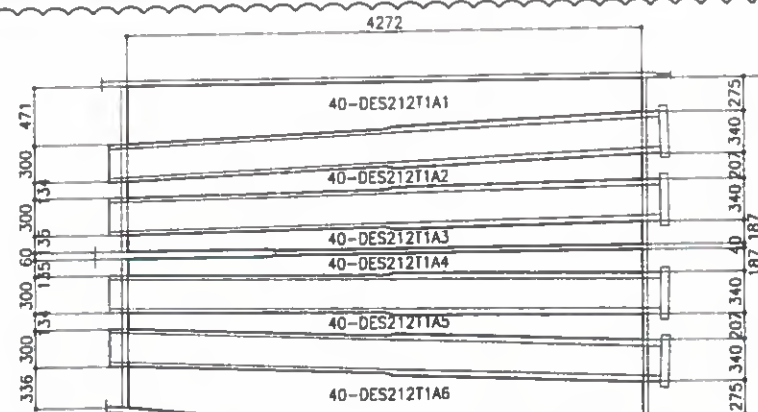
DRAWING NO.	REV.
RA140-22-BRG-SD-D-212T1g	A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

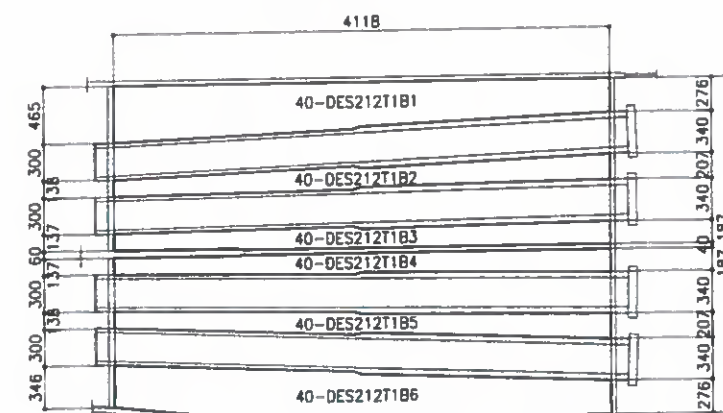
SECT. D1
"INSIDE END PLATE" DETAIL



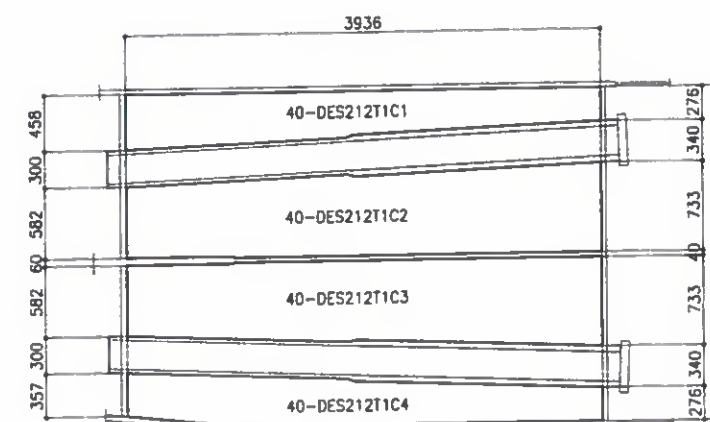
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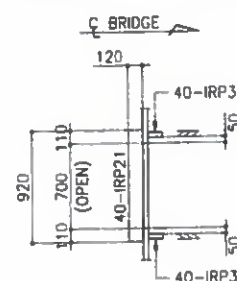
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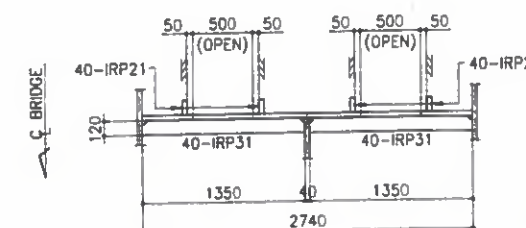
SECT. D22



SECT. D23

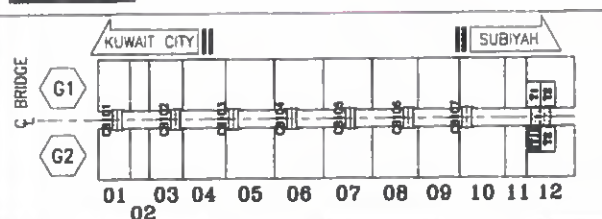


SECT. A4



SECT. B8

KEY-PLAN



ONE - STEEL DECK - G212T1

Refer To Comments on
Dnw. # SD-D-1121h-A

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
6. C10 or C18 or C20: FILL WITH WELD

■ REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-236
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-114
USC31 ~ USC40	SD-STD-121-125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-149
ISC01 ~ ISC10	SD-STD-181-184
SPLICE	SD-STD-301-305
DS01, DS02	SD-STD-401-403

A	2018.02.25	FOR APPROVAL	H. J. PARK	S. S. SON	S. J. LEE
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

STEEL DECK DETAIL "G212T1" (8)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



HYUNDA
ENGINEERING & CONSTRUCTION



Combined Group
Contracting Company

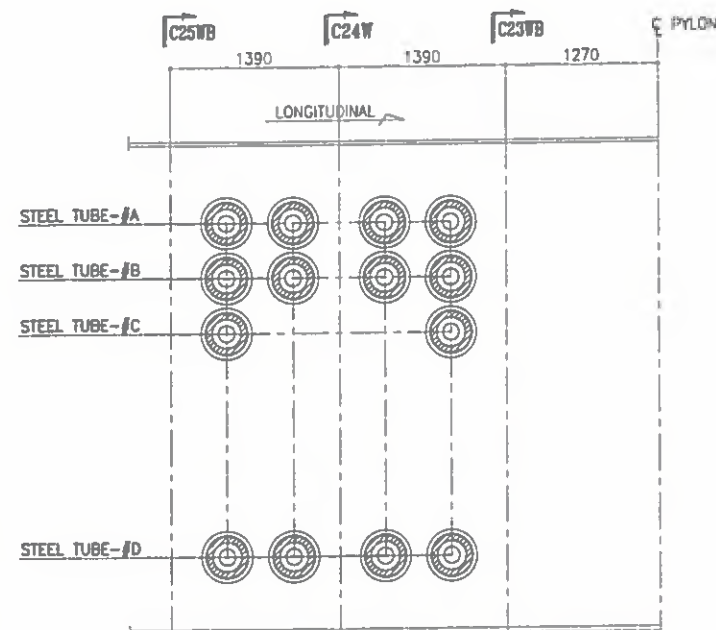
DRAWING NO.

RA140-22-BRG-SD-D-212T1h

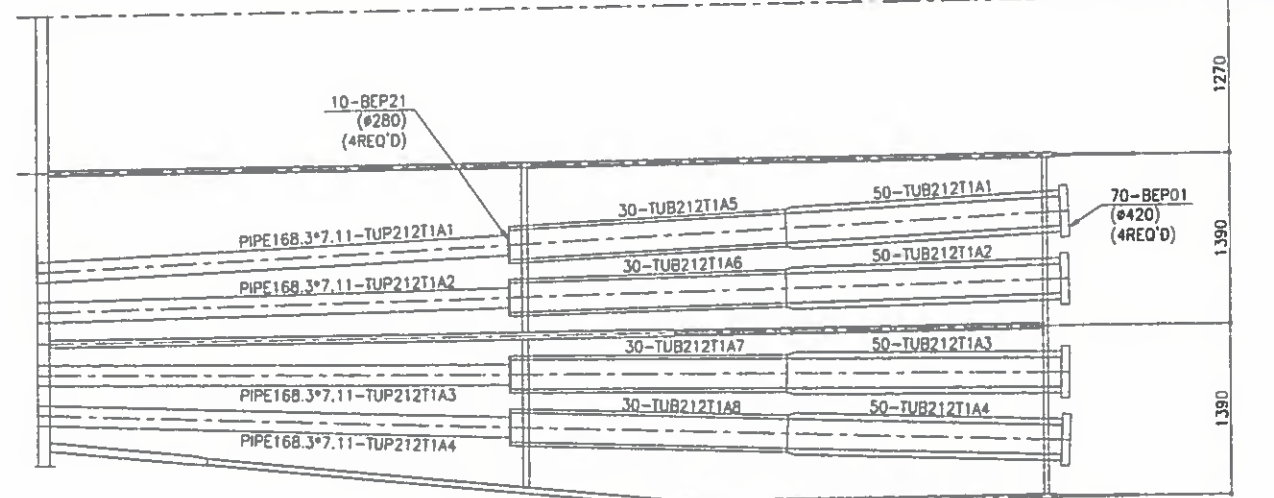
RE

FOR
APPROVAL
2016.02.25
HYUNDAI E&
YOULCHON

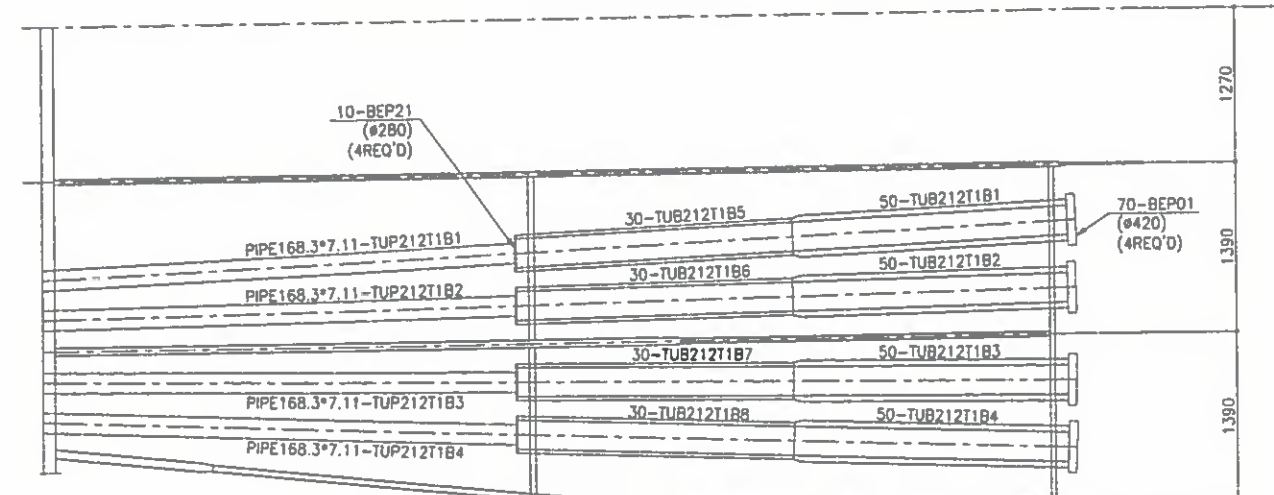
HOLD



STEEL TUBE ARRANGEMENT

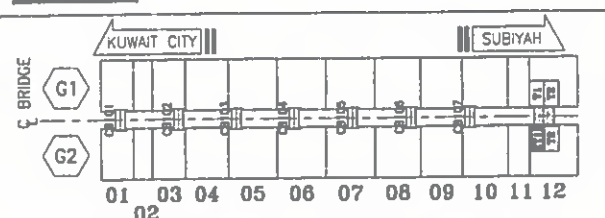


"STEEL TUBE-#A" DETAIL



"STEEL TUBE-#B" DETAIL

KEY-PLAN



ONE - STEEL DECK - G212T1

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=30, C=15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T1" (10)

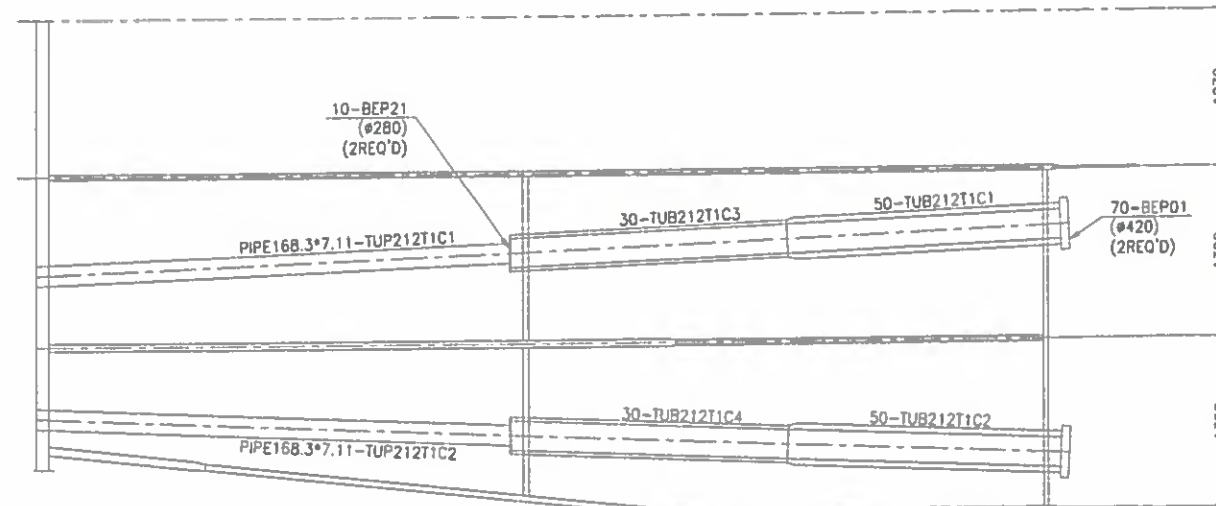
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHON	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

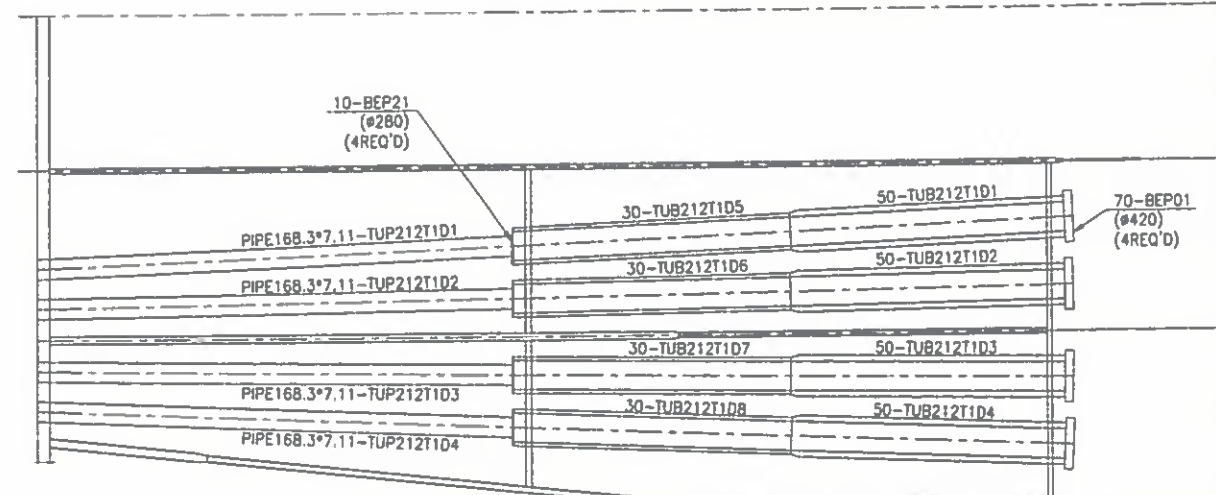
DRAWING NO.
RA140-22-BRG-SD-D-212T1k

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HOLD

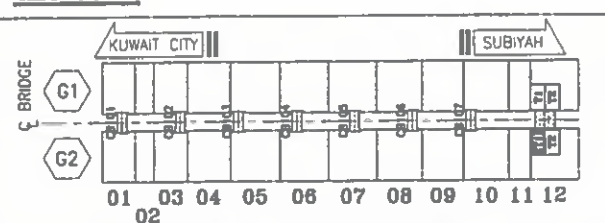


"STEEL TUBE-#C" DETAIL



"STEEL TUBE-#D" DETAIL

KEY-PLAN



ONE - STEEL DECK - G212T1



NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R- 25, P- 16 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHCK.	APPRO.
1	2016.02.25	FOR APPROVAL	H.J. PARK	S.S. SON	S.M. KHON

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION



PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T1" (11)

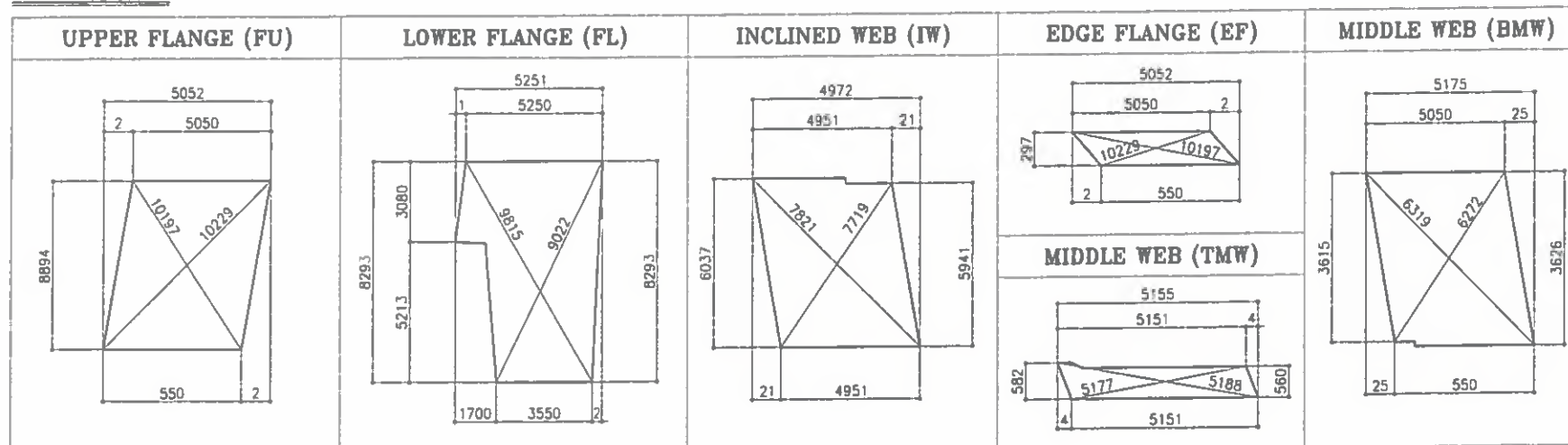
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NGR	H.J. PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

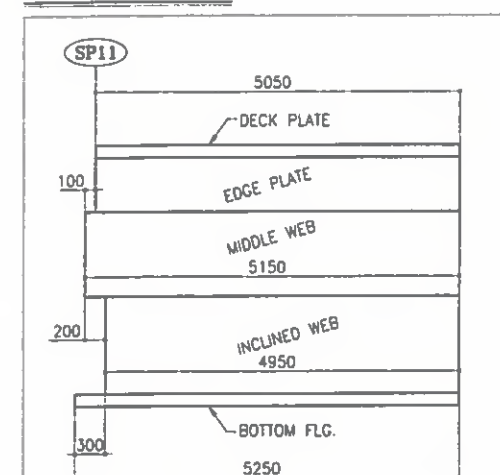
DRAWING NO.
RA140-22-BRG-SD-D-212T1m
REV.
A



DIAGONAL



ASSEMBLY VIEW



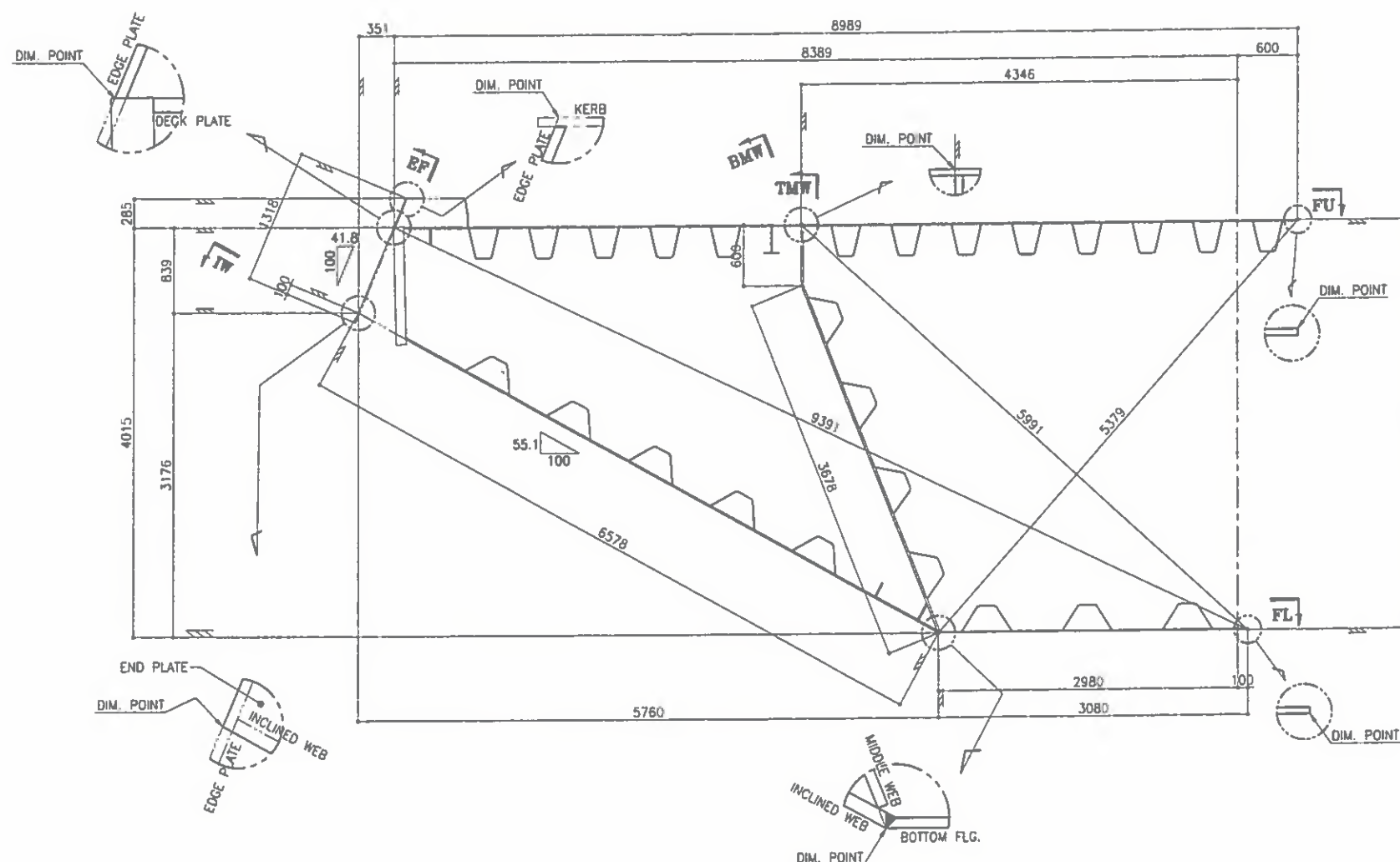
FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

NOTES

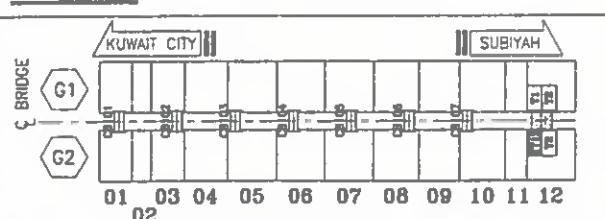
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2. ROLLUP R= 35, D= 15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{4}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.:
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403



KEY-PLAN



GENERAL SECTION

SP11 SIDE

ONE - STEEL DECK - G212T1

FOR APPROVAL
 2016.02.25
 HYUNDAI E&S
 YOUNGCHON

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
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EMPLOYER

STATE OF KUWAIT
 MINISTRY OF PUBLIC WORKS
 ROADS ADMINISTRATION

PROJECT TITLE
 SHEIKH JABER AL AHMAD AL SABAH
 CAUSEWAY PROJECT (MAIN LINK)
 CONTRACT RA/140

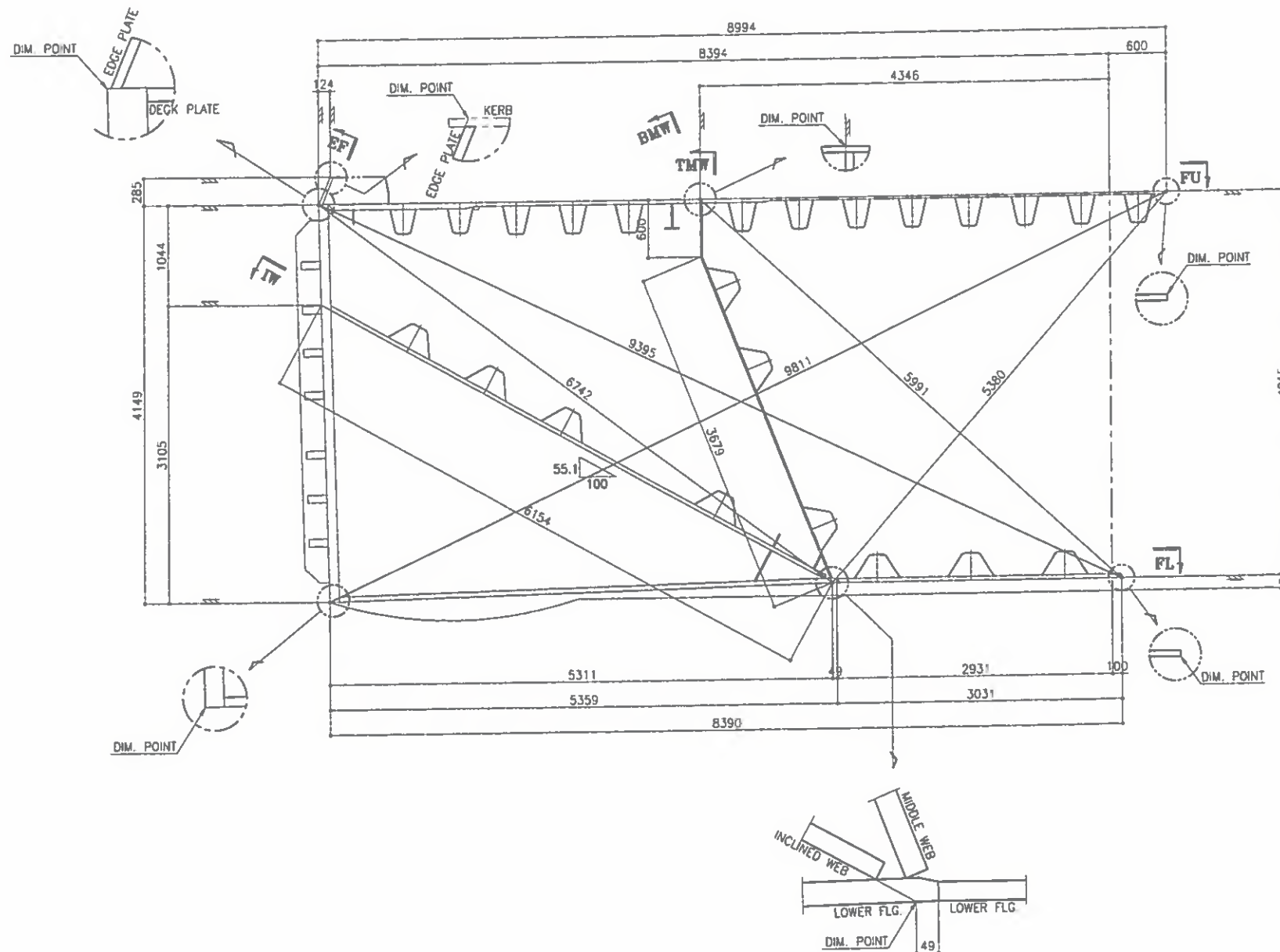
DRAWING TITLE
 MAIN BRIDGE
 STEEL DECK
 STEEL DECK DETAIL "G212T1" (12)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

HYUNDAI
 E&S
 YOUNGCHON

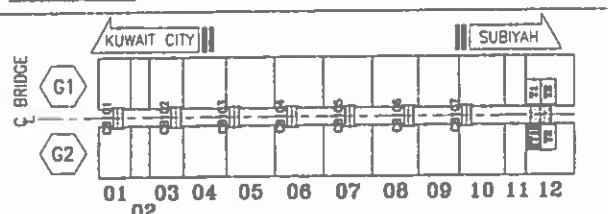
DRAWING NO.
 RA140-22-BRG-SD-D-212T1n
 REV.
 A



GENERAL SECTION
[G212T2] JOINT SIDE

ONE - STEEL DECK - G212T1

KEY-PLAN



HYUNDAI CONSTRUCTION GROUP
FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 25, C= 15 UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C18 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.J.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

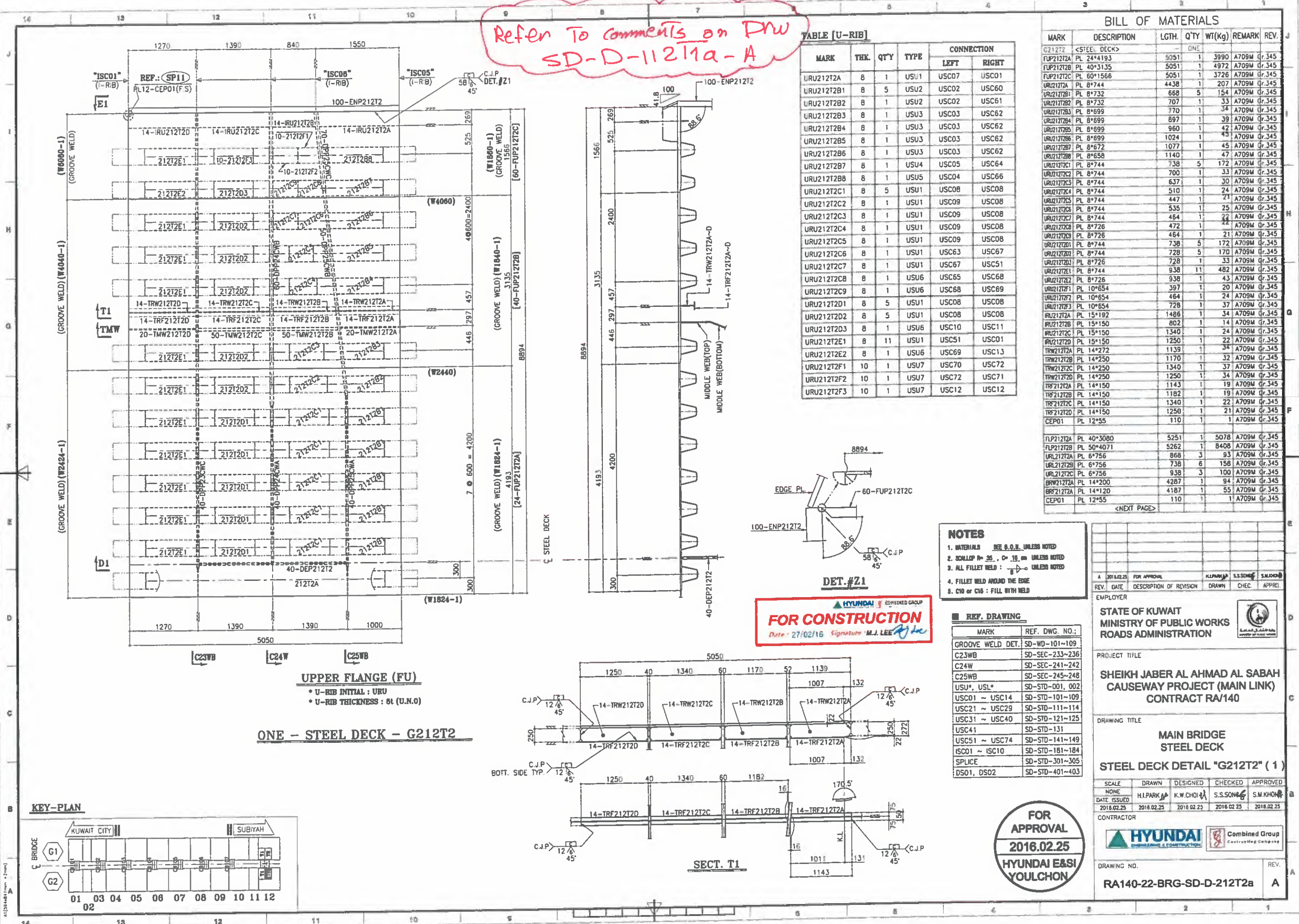
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T1" (13)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.J.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group Contracting Company

DRAWING NO.
RA140-22-BRG-SD-D-212T1p

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON



Refer to comments on Draw. SD-D-112T1b-A

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R = 35, ϕ = 15 UNLESS NOTED
3. ALL FILLET WELD : $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 : FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-236
C24W	SD-SEC-241-242
C25WB	SD-SEC-245-248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101-109
USC21 ~ USC29	SD-STD-111-114
USC31 ~ USC40	SD-STD-121-125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-149
ISC01 ~ ISC10	SD-STD-181-184
SPLICE	SD-STD-301-305
DS01, DS02	SD-STD-401-403

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G212T2	<STEEL DECK>	ONE				
W212T2A	PL 40*2813	1224	1	1081	A709M Gr.345	
W212T2B	PL 40*3225	1423	1	1441	A709M Gr.345	
W212T2C	PL 40*2716	1350	1	1151	A709M Gr.345	
W212T2D	PL 40*3225	1097	1	1111	A709M Gr.345	
W212T2E	PL 40*2716	1350	1	1151	A709M Gr.345	
W212T2F	PL 40*3225	1351	1	1368	A709M Gr.345	
W212T2G	PL 40*2716	1260	1	1075	A709M Gr.345	
W212T2H	PL 40*3225	1261	1	1277	A709M Gr.345	
UR212T2A1	PL 6*756	713	1	25	A709M Gr.345	
UR212T2A2	PL 6*756	798	1	28	A709M Gr.345	
UR212T2A3	PL 6*756	884	1	31	A709M Gr.345	
UR212T2A4	PL 6*756	967	1	34	A709M Gr.345	
UR212T2A5	PL 6*756	1045	1	37	A709M Gr.345	
UR212T2B1	PL 6*756	602	1	21	A709M Gr.345	
UR212T2B2	PL 6*756	431	1	15	A709M Gr.345	
UR212T2B3	PL 6*756	499	1	18	A709M Gr.345	
UR212T2B4	PL 6*756	470	1	17	A709M Gr.345	
UR212T2C	PL 6*756	728	3	78	A709M Gr.345	
UR212T2D	PL 6*756	938	4	134	A709M Gr.345	
IRM212T2A	PL 15*163	579	1	11	A709M Gr.345	
IRM212T2B	PL 15*163	1325	1	25	A709M Gr.345	
IRM212T2C	PL 15*163	1340	1	26	A709M Gr.345	
IRM212T2D	PL 15*163	944	1	18	A709M Gr.345	
IRM212T2E	PL 15*372	1260	1	55	A709M Gr.345	
IRM212T2F	PL 15*372	1340	1	59	A709M Gr.345	
IRM212T2G	PL 15*372	944	1	41	A709M Gr.345	
IRM212T2H	PL 15*150	930	1	16	A709M Gr.345	
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP22	PL 40*120	720	4	163	A709M Gr.345	
CEP01	PL 12*55	110	1	1	A709M Gr.345	
EP212T2A	PL 32*298	5052	1	378	A709M Gr.345	
EP212T2B	PL 32*228	1403	1	80	A709M Gr.345	
EP212T2C	PL 32*416	1404	1	147	A709M Gr.345	
EP212T2D	PL 32*127	1402	1	45	A709M Gr.345	
EP212T2E	PL 40*357	1402	1	157	A709M Gr.345	
EP212T2F	PL 10*359	1011	1	28	A709M Gr.345	
TW212T2A	PL 20*582	1210	1	111	A709M Gr.345	
TW212T2B	PL 50*560	1206	1	265	A709M Gr.345	
TW212T2C	PL 50*560	1344	1	295	A709M Gr.345	
TW212T2D	PL 20*560	1254	1	110	A709M Gr.345	
BW212T2A	PL 20*3615	1231	1	699	A709M Gr.345	
BW212T2B	PL 50*3626	1365	1	1943	A709M Gr.345	
BW212T2C	PL 50*3626	1365	1	1943	A709M Gr.345	
BW212T2D	PL 20*3626	1275	1	726	A709M Gr.345	
URM212T2A	PL 6*756	893	1	32	A709M Gr.345	
URM212T2B	PL 6*756	857	1	31	A709M Gr.345	
URM212T2C	PL 6*756	821	1	29	A709M Gr.345	
URM212T2D	PL 6*756	785	1	28	A709M Gr.345	
URM212T2E	PL 6*756	938	3	100	A709M Gr.345	

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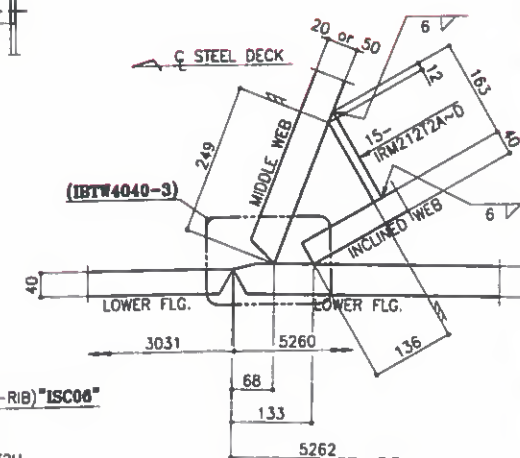
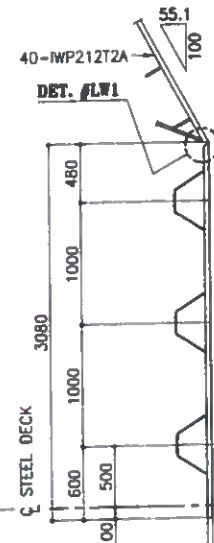
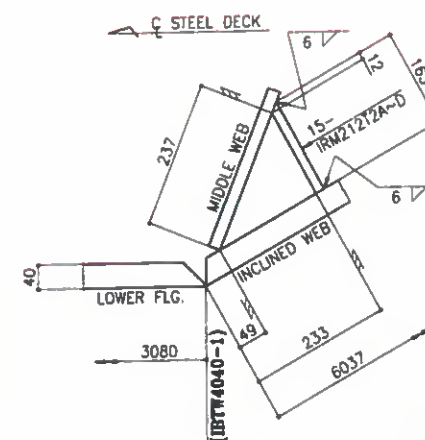
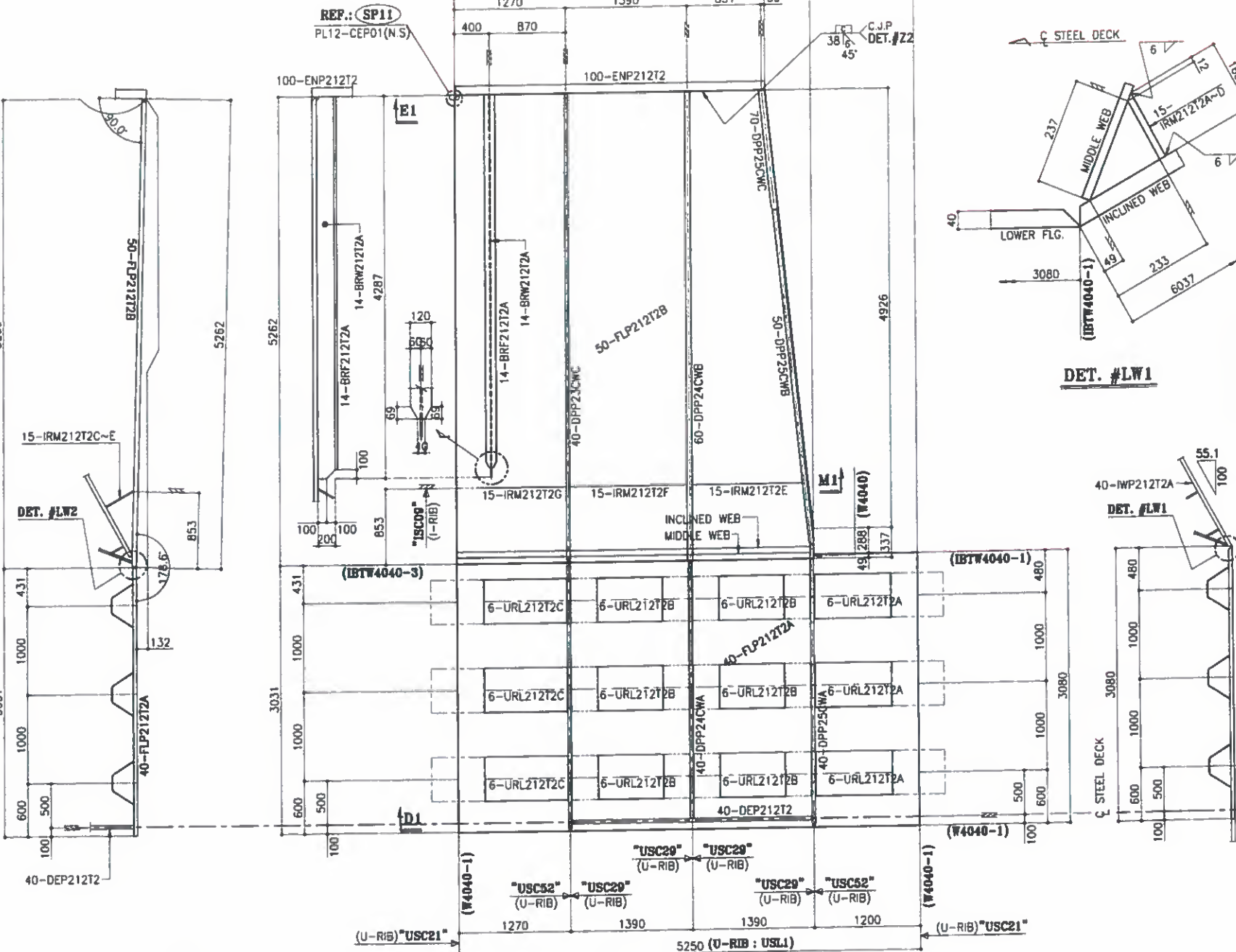
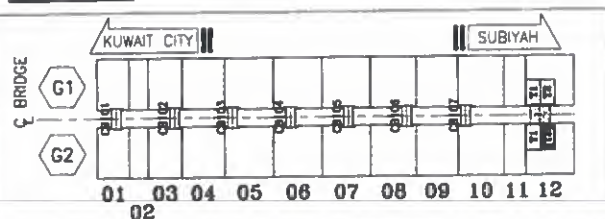
ONE - STEEL DECK - G212T2

LOWER FLANGE (FL)

SECT. M1

DET. #LW2

KEY-PLAN



FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

REV. DATE DESCRIPTION OF REVISION DRAWN CHIC. APPRO.

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (2)

SCALE
NONE
DATE ISSUED
2016.02.25
CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-D-212T2b

REV.
A

Refer To Comments on
DRW. # SD-D-112TIC-A

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G212T2	<STEEL DECK>	-	ONE			
IRP21	PL 40*120	920	5	173	A709M Gr.345	
IRP23	PL 40*120	1278	1	48	A709M Gr.345	
IRP24	PL 40*120	1316	1	50	A709M Gr.345	
IRP25	PL 40*120	1340	2	101	A709M Gr.345	
DEP212T2	PL 40*3972	2740	1	3417	A709M Gr.345	
DES212T2A1	PL 40*471	4272	1	632	A709M Gr.345	
DES212T2A2	PL 40*207	4272	1	278	A709M Gr.345	
DES212T2A3	PL 40*187	4272	1	251	A709M Gr.345	
DES212T2A4	PL 40*187	4272	1	251	A709M Gr.345	
DES212T2A5	PL 40*207	4272	1	278	A709M Gr.345	
DES212T2A6	PL 40*336	4272	1	451	A709M Gr.345	
DES212T2B1	PL 40*465	4118	1	601	A709M Gr.345	
DES212T2B2	PL 40*207	4118	1	268	A709M Gr.345	
DES212T2B3	PL 40*187	4118	1	242	A709M Gr.345	
DES212T2B4	PL 40*187	4118	1	242	A709M Gr.345	
DES212T2B5	PL 40*207	4118	1	268	A709M Gr.345	
DES212T2B6	PL 40*346	4118	1	447	A709M Gr.345	
DES212T2C1	PL 40*458	3936	1	566	A709M Gr.345	
DES212T2C2	PL 40*733	3936	1	906	A709M Gr.345	
DES212T2C3	PL 40*733	3936	1	906	A709M Gr.345	
DES212T2C4	PL 40*357	3936	1	441	A709M Gr.345	
DES212T2D1	PL 40*425	3095	1	413	A709M Gr.345	
DES212T2D2	PL 40*206	3095	1	200	A709M Gr.345	
DES212T2D3	PL 40*186	3095	1	181	A709M Gr.345	
DES212T2D4	PL 40*186	3095	1	181	A709M Gr.345	
DES212T2D5	PL 40*206	3095	1	200	A709M Gr.345	
DES212T2D6	PL 40*408	3095	1	397	A709M Gr.345	
IRP21	PL 40*120	920	4	139	A709M Gr.345	
IRP31	PL 40*120	1350	4	203	A709M Gr.345	
RUC01	RUBBERCAP D20	-	8		RUBBER	
ENP212T2	PL 100*4150	5080	1	16549	A709M Gr.345	
ENS212T2A	PL 70*200	1400	1	154	A709M Gr.345	
ENS212T2B	PL 70*380	1400	1	292	A709M Gr.345	
ENS212T2C	PL 80*250	3780	5	2967	A709M Gr.345	
ENS212T2D	PL 80*200	339	28	1192	A709M Gr.345	
ENS212T2E	PL 80*200	230	7	202	A709M Gr.345	
ENS212T2F	PL 80*200	250	7	220	A709M Gr.345	
TUB212T2A1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T2A2	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T2A3	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T2A4	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T2A5	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T2A6	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T2A7	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T2A8	PL 30*848	2296	1	459	A709M Gr.345	
TUB212T2B1	PL 50*911	2280	1	815	A709M Gr.345	
TUB212T2B2	PL 50*911	2280	1	815	A709M Gr.345	

<NEXT PAGE>

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R=38, Ø=15 mm UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER

STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE

SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (3)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SONG	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR

HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.

RA140-22-BRG-SD-D-212T2c

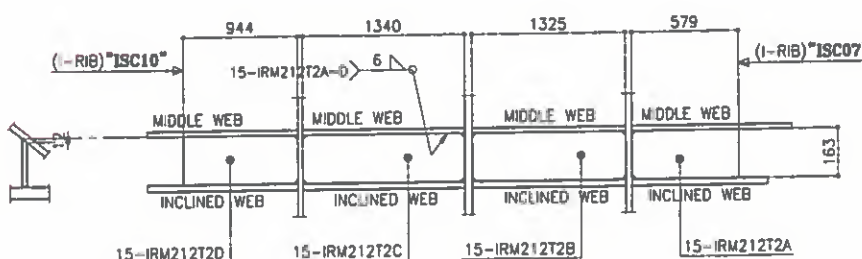
REV.

A

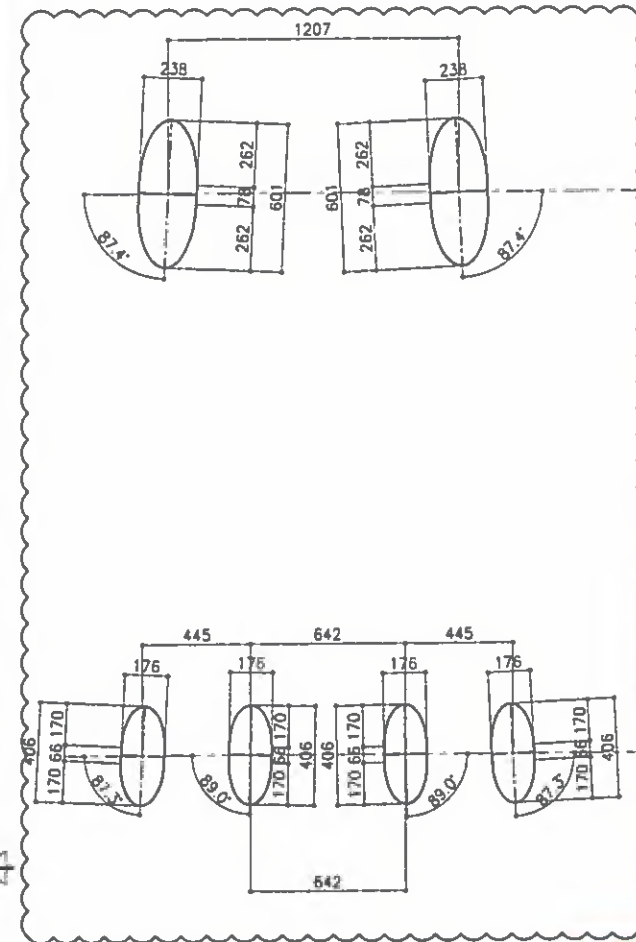
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INCLINED WEB (IW)

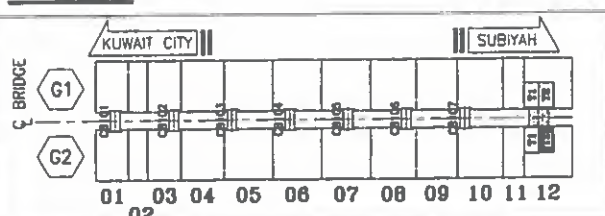
ONE - STEEL DECK - G212T2

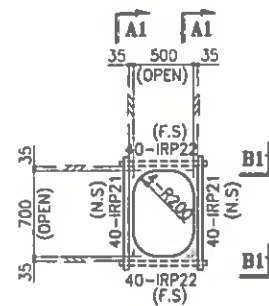


SECT. M2

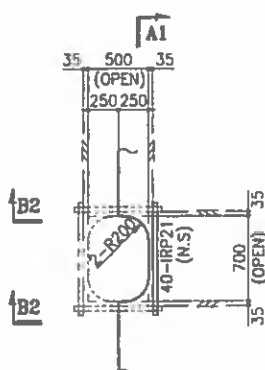


KEY-PLAN



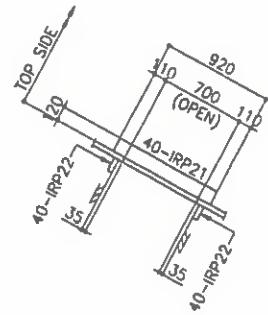


DIAPH. IN SIDE

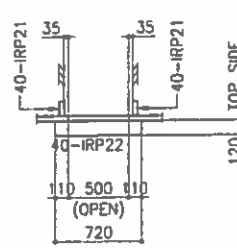


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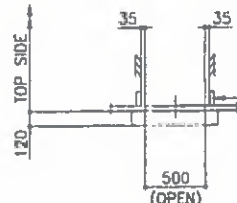
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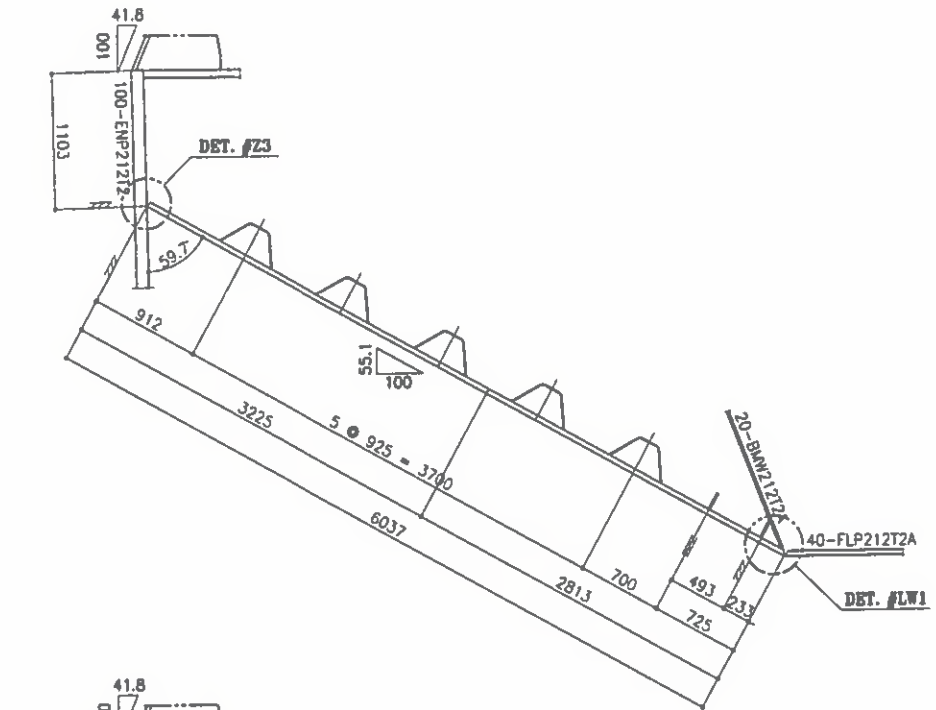
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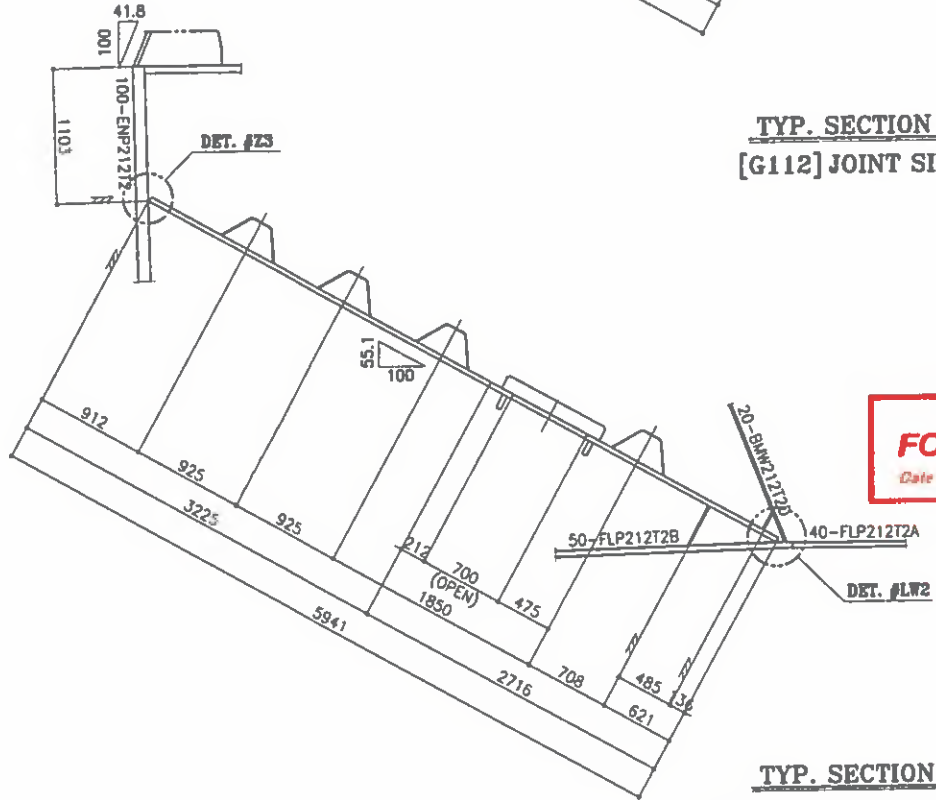
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SECT. B2

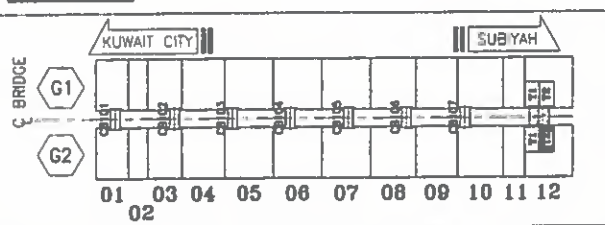


TYP. SECTION
[G112] JOINT SIDE



TYP. SECTION
[G112T1] JOINT SIDE

KEY-PLAN



- NOTES**
1. MATERIALS SEE D.O.B. UNLESS NOTED
 2. SCALLOP R= 35, O= 15 UNLESS NOTED
 3. ALL FILLET WELD : UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15 or C20: FILL WITH WELD

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	QTY	WT(Kg)	REMARK	REV.
G212T2	<STEEL DECK>		ONE			
TU8212T2B3	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2B4	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2B5	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2B6	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2B7	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2B8	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2C1	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2C2	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2C3	PL 30*848	2296	1	459	A709M Gr.345	
TU8212T2C4	PL 30*848	2296	1	459	A709M Gr.345	
TU8212T2D1	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2D2	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2D3	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2D4	PL 50*911	2280	1	815	A709M Gr.345	
TU8212T2D5	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2D6	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2D7	PL 30*848	2306	1	461	A709M Gr.345	
TU8212T2D8	PL 30*848	2306	1	461	A709M Gr.345	
TUP212T2A1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2A2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2A3	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2A4	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2B1	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP212T2B2	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP212T2B3	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP212T2B4	PIPE D168.3*7.11	3936	1	111	ASTM A53	
TUP212T2C1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2C2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2D1	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2D2	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2D3	PIPE D168.3*7.11	3926	1	111	ASTM A53	
TUP212T2D4	PIPE D168.3*7.11	3926	1	111	ASTM A53	
BEP01	PL 70*420	420	14	1357	A709M Gr.345	
BEP21	PL 10*280	280	14	86	A709M Gr.345	
C23WB	<DIAPHRAGM>		1	11387		
C24W	<DIAPHRAGM>		1	15219		
C25WB	<DIAPHRAGM>		1	13838		
USC01	<U-RIB CONNECTION>		12	564		
USC08	<U-RIB CONNECTION>		34	544		
USC09	<U-RIB CONNECTION>		4	64		
USC10	<U-RIB CONNECTION>		1	16		
USC11	<U-RIB CONNECTION>		1	16		
USC12	<U-RIB CONNECTION>		2	34		
USC13	<U-RIB CONNECTION>		1	46		
USC21	<U-RIB CONNECTION>		3	141		
USC29	<U-RIB CONNECTION>		20	260		
USC31	<U-RIB CONNECTION>		7	329		
USC37	<U-RIB CONNECTION>		13	26		
USC40	<U-RIB CONNECTION>		1	2		

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
A	2016.02.25	FOR APPROVAL	H.L.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (4)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W.CHOI	S.S.SON	S.M.KHON

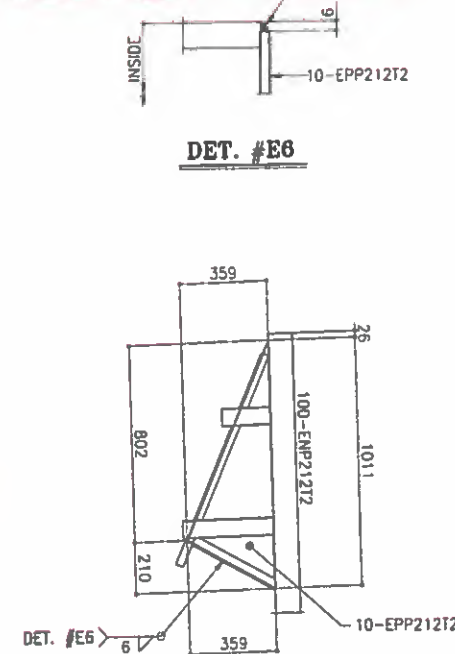
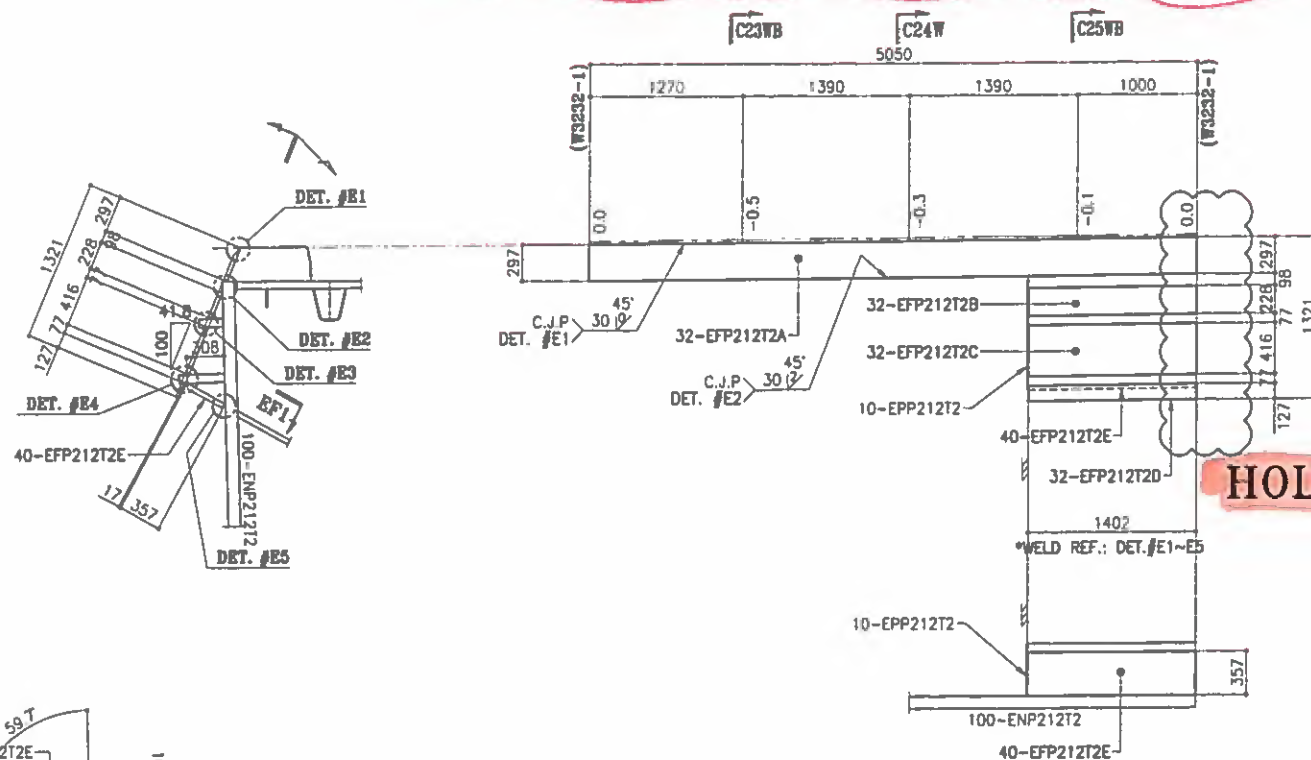
DATE ISSUED
2016.02.25

CONTRACTOR
**HYUNDAI E&S
YOULCHON**

DRAWING NO
RA140-22-BRG-SD-D-212T2d

REV
A

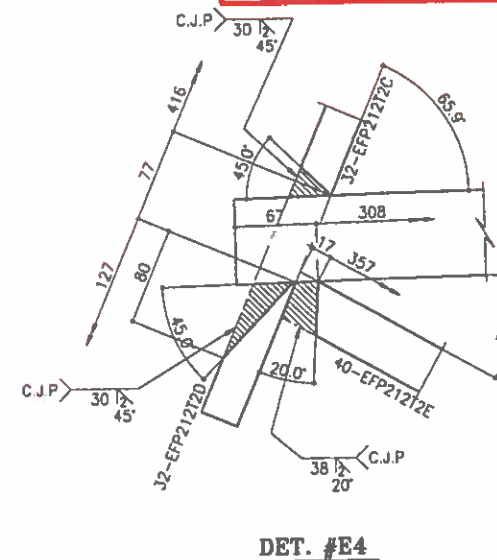
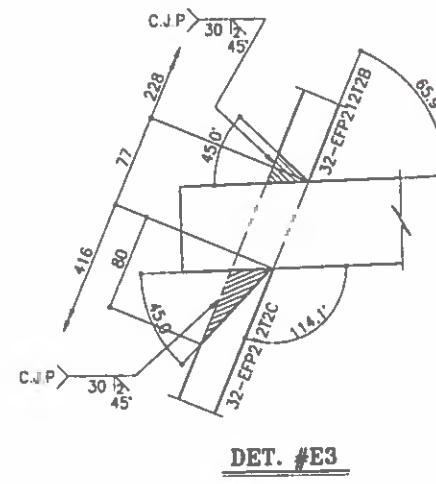
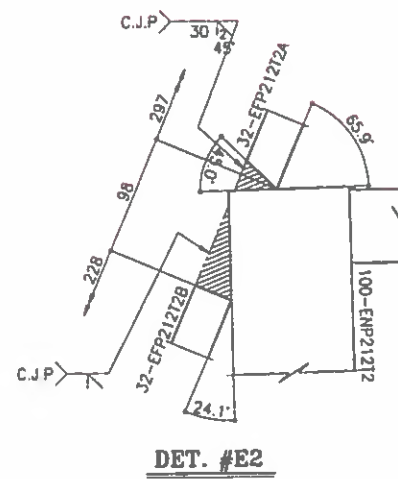
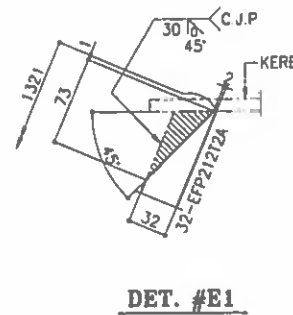
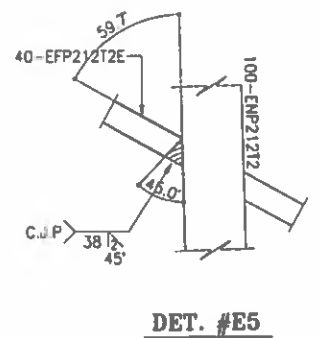
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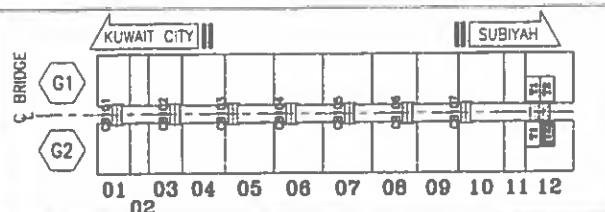
"10-EPP212T2" DETAIL

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

EDGE FLANGE (EF)



KEY-PLAN



ONE - STEEL DECK - G212T2

NOTES

1. MATERIALS: SEE B.O.M. UNLESS NOTED
2. SCALLOP: 35, 0-15 mm UNLESS NOTED
3. ALL FILLET WELD: 30 UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

BILL OF MATERIALS

MARK	DESCRIPTION	LGTH.	Q'TY	WT(Kg)	REMARK	REV.
G212T2	<STEEL DECK>	-	ONE			
USC51	<U-RIB CONNECTION>	-	12	12		
USC52	<U-RIB CONNECTION>	-	14	14		
USC60	<U-RIB CONNECTION>	-	5	5		
USC67	<U-RIB CONNECTION>	-	1	1		
USC68	<U-RIB CONNECTION>	-	1	1		
USC69	<U-RIB CONNECTION>	-	2	2		
USC71	<U-RIB CONNECTION>	-	1	1		
USC72	<U-RIB CONNECTION>	-	1	1		
ISC09	<I-RIB CONNECTION>	-	1	28		
ISC10	<I-RIB CONNECTION>	-	1	12		

S.TOTAL = 144720

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPRO.
------	------	-------------------------	-------	-------	--------

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (5)

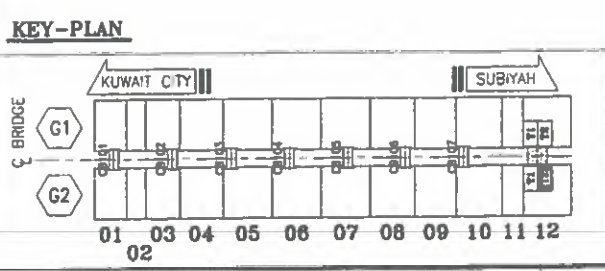
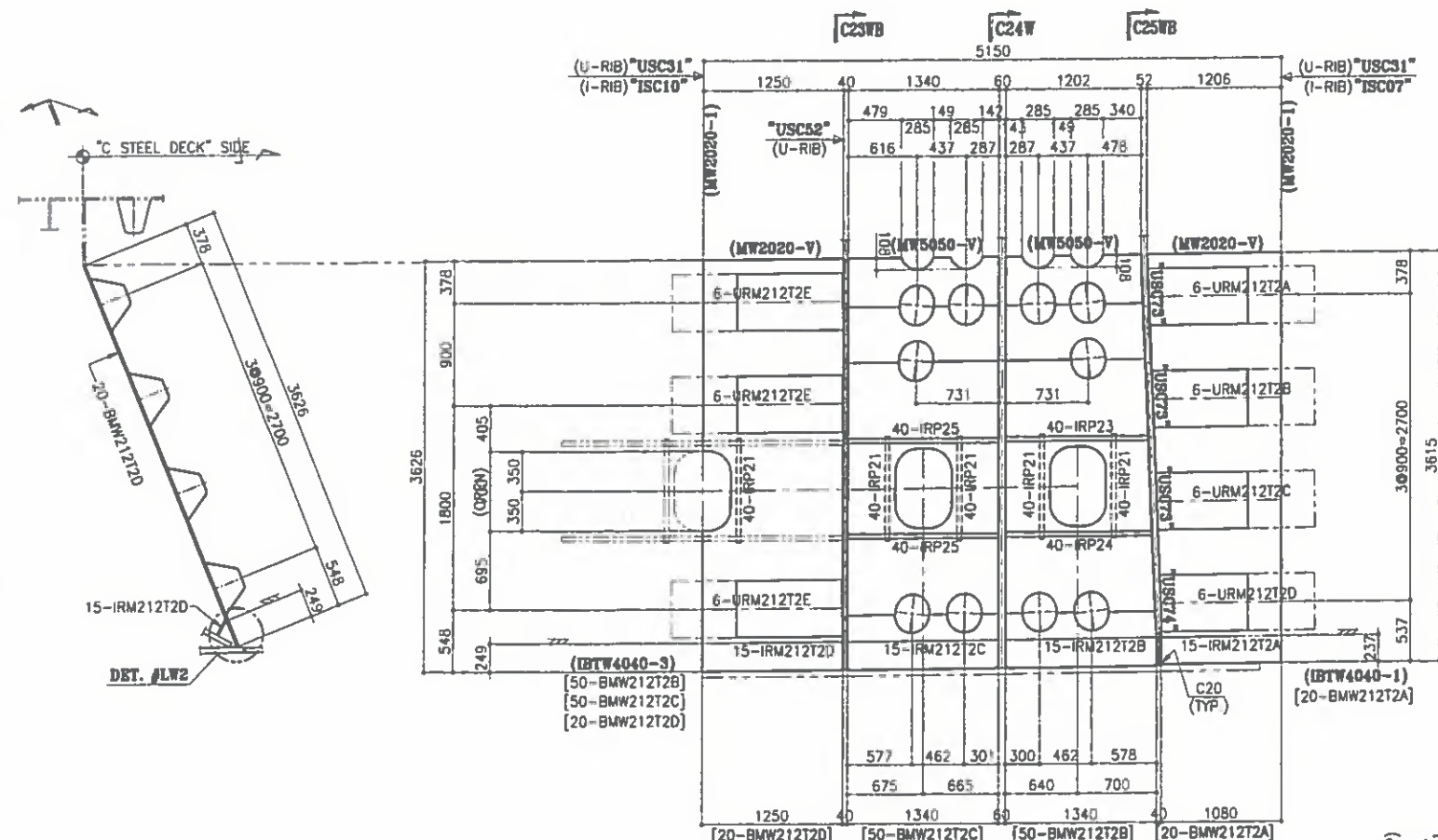
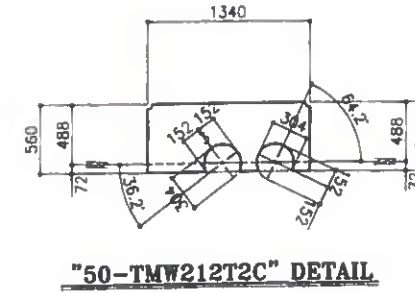
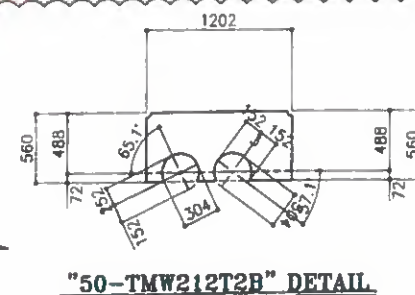
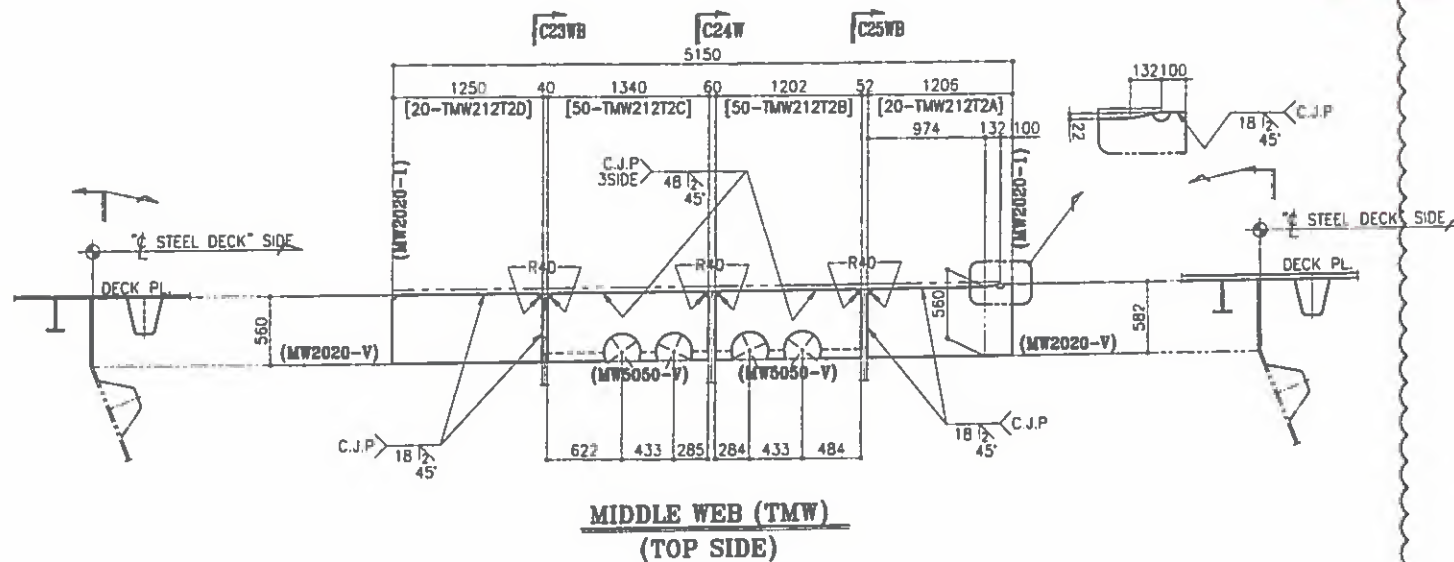
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
Engineering & Construction

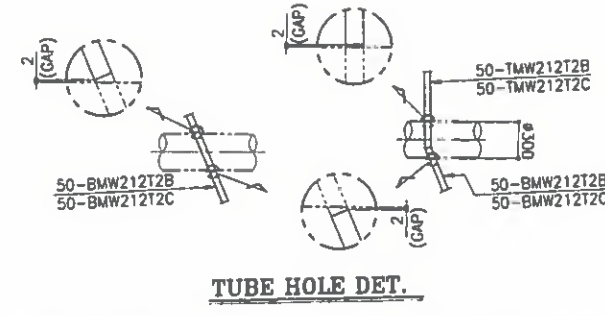
DRAWING NO.
RA140-22-BRG-SD-D-212T2e

HOLD

Refer To Comments
on DRW. SD-D-112T7 P.A



ONE - STEEL DECK - G212T2



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE S.O.M. UNLESS NOTED
 2. SCALLOP R=38, O=15 mm UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

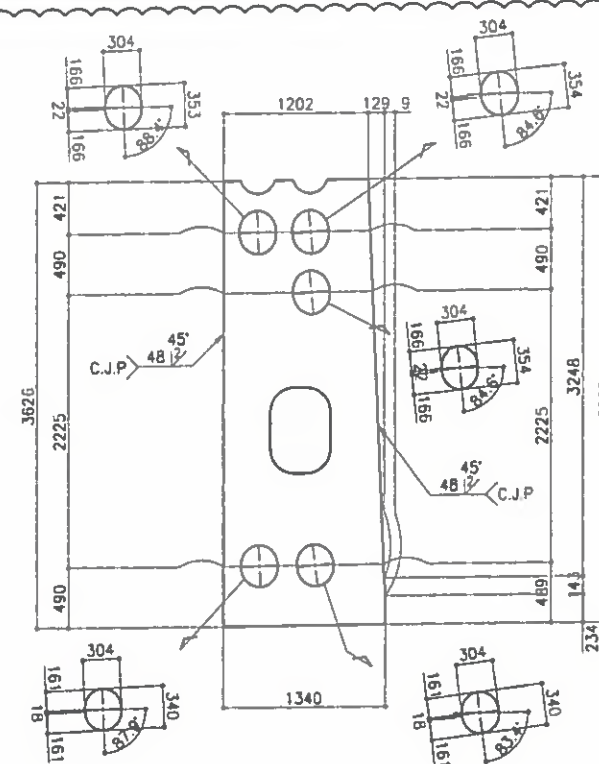
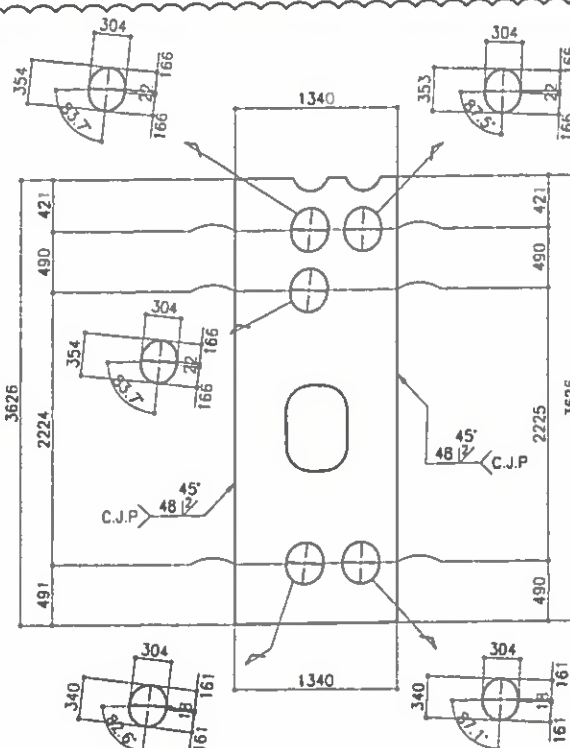
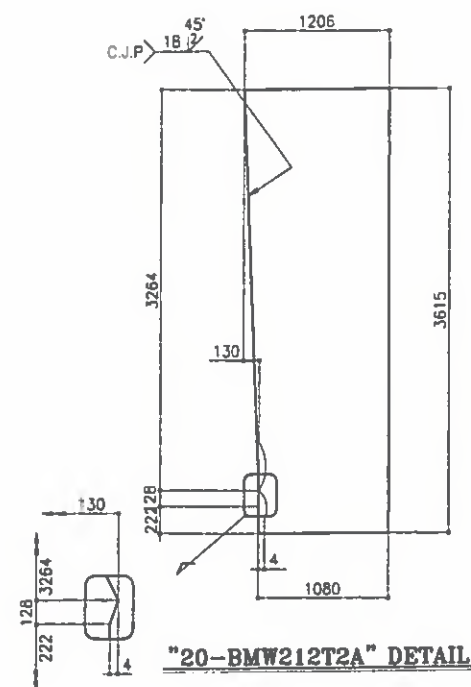
DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (6)**

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI E&S I YOULCHON

FOR APPROVAL
2016.02.25
HYUNDAI E&S I YOULCHON

DRAWING NO.
RA140-22-BRG-SD-D-212T2f



HOLD

Refer To comments
on Drw. #
SD-D-11211g-A

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 35 , C= 15 mm UNLESS NOTED
3. ALL FILLET WELD :  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C20 or C16 or C20: FILL WITH WELD

■ REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101-109
C23WB	SD-SEC-233-23
C24W	SD-SEC-241-24
C25WB	SD-SEC-245-24
USJ*, USL*	SD-STD-001, 00
USC01 ~ USC14	SD-STD-101-10
USC21 ~ USC29	SD-STD-111-11
USC31 ~ USC40	SD-STD-121-12
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141-14
ISC01 ~ ISC10	SD-STD-181-18
SPLICE	SD-STD-301-30
DS01, DS02	SD-STD-401-40

A	2016.02.25	FOR APPROVAL	HJ PARK	S.S. SONG	S. LION
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPR.

EMPLOYER

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (7)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHO
DATE ISSUED	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



HYUNDAI
SUSTAINING A COMMITMENT

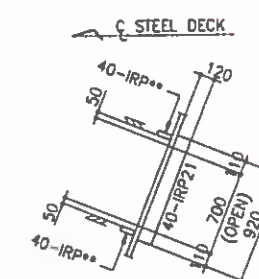
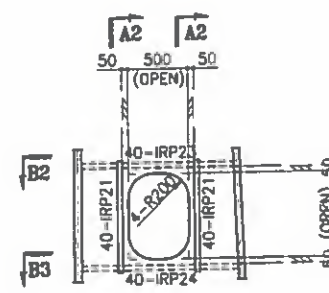
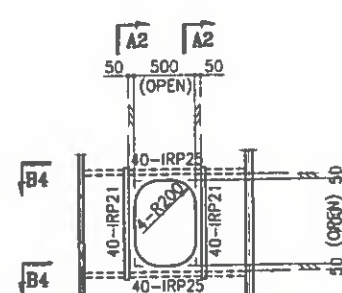
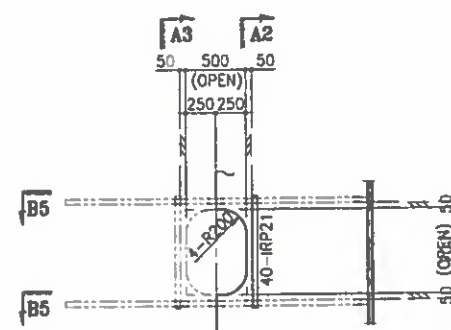
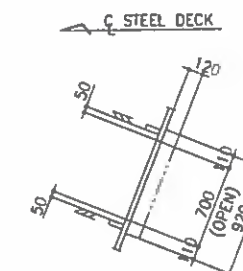
Combined Gro
 Contracting Corp.

DRAWING NO.

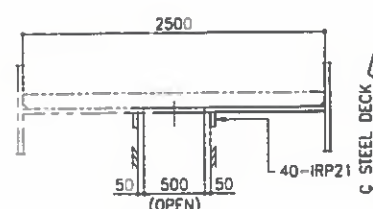
RA140-22-BRG-SD-D-212T2g

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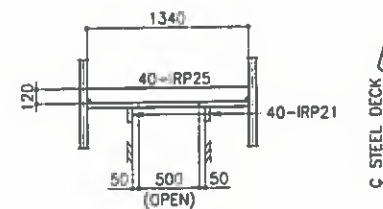
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**SECT. A2**

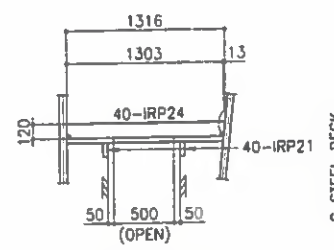
SECT. A3



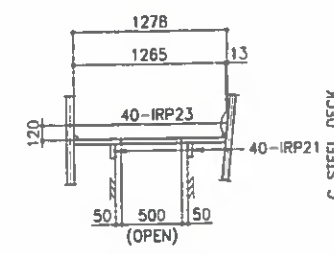
SECT. B5



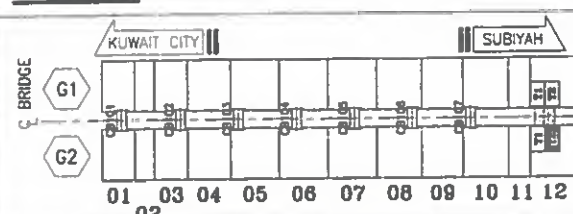
SECT. B4



SECT. B3



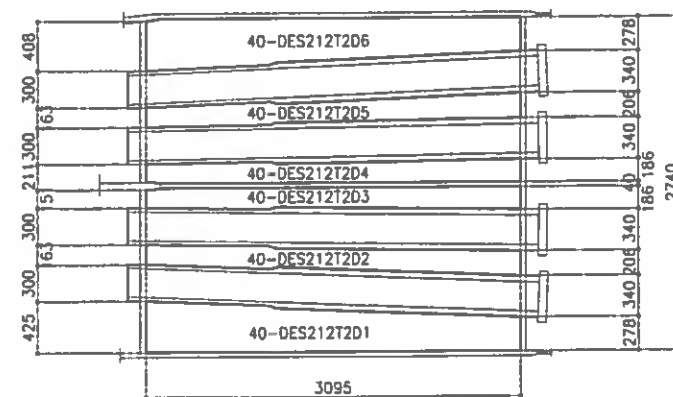
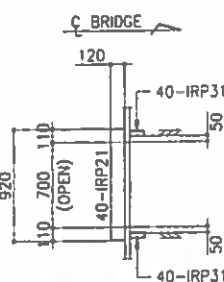
SECT. B2



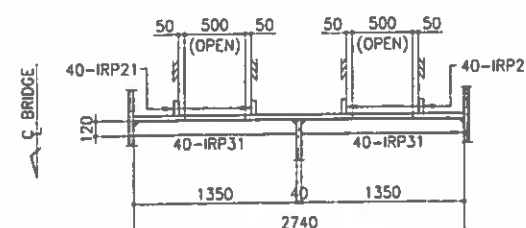
MIDDLE WEB (BMW)
(BOTTOM SIDE)

ONE - STEEL DECK - G212T2

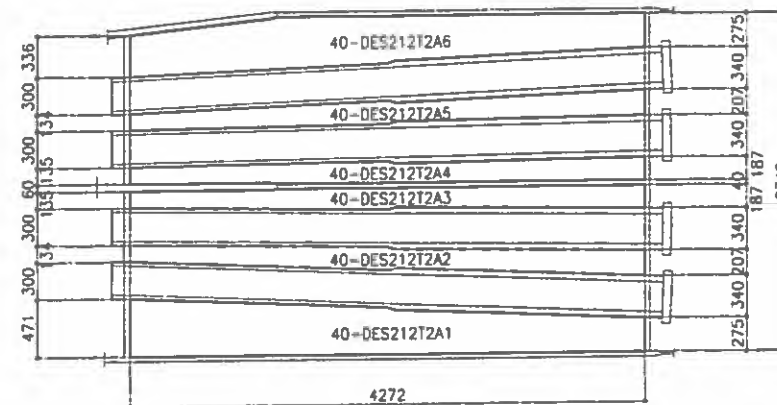
FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

SECT. D24

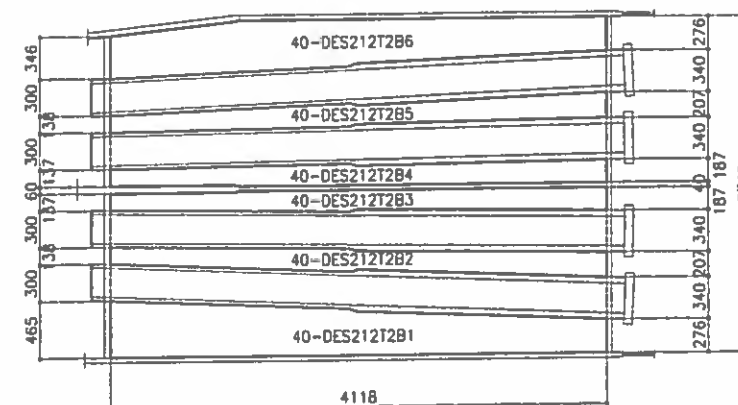
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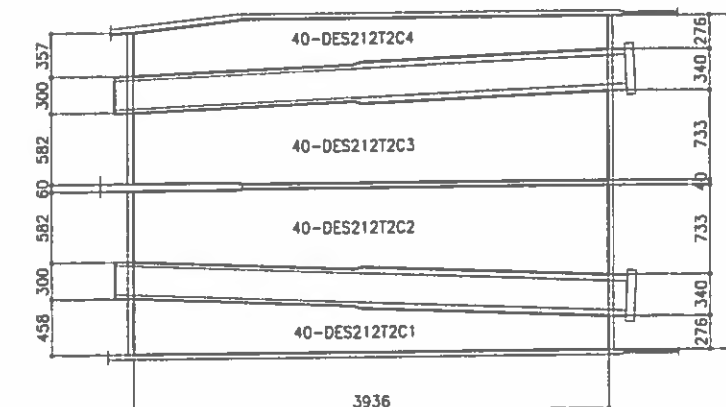
SECT. B6



SECT. D21



SECT. D22



SECT. D23

Refer To comments
on Draw. #
SD-D-112Th-A

FOR CONSTRUCTION
Date : 27/02/16 Signature : M.J. LEE

NOTES

1. MATERIALS SEE D.O.W. (UNLESS NOTED)
2. SCALLOP R= 35, C= 15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{6}{8}$  UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
6. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

A	2018.02.25	FOR APPROVAL	H.PARK	S.SOH	S.MOON
REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPROV

**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE

**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE

**MAIN BRIDGE
STEEL DECK**

STEEL DECK DETAIL "G212T2" (8)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVE
NONE	H.I.PARK <i>HP</i>	K.W.CHOI <i>KWC</i>	S.S.SON <i>SSS</i>	S.M.KHON
DATE ISSUED				
2018.02.25	2018.02.25	2018.02.25	2018.02.25	2018.02.25

CONTRACTOR



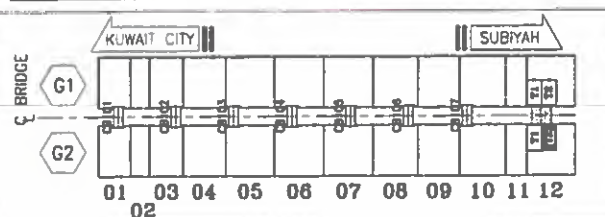
DRAWING NO.

RA140-22-BRG-SD-D-212T2h

REV.	
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A

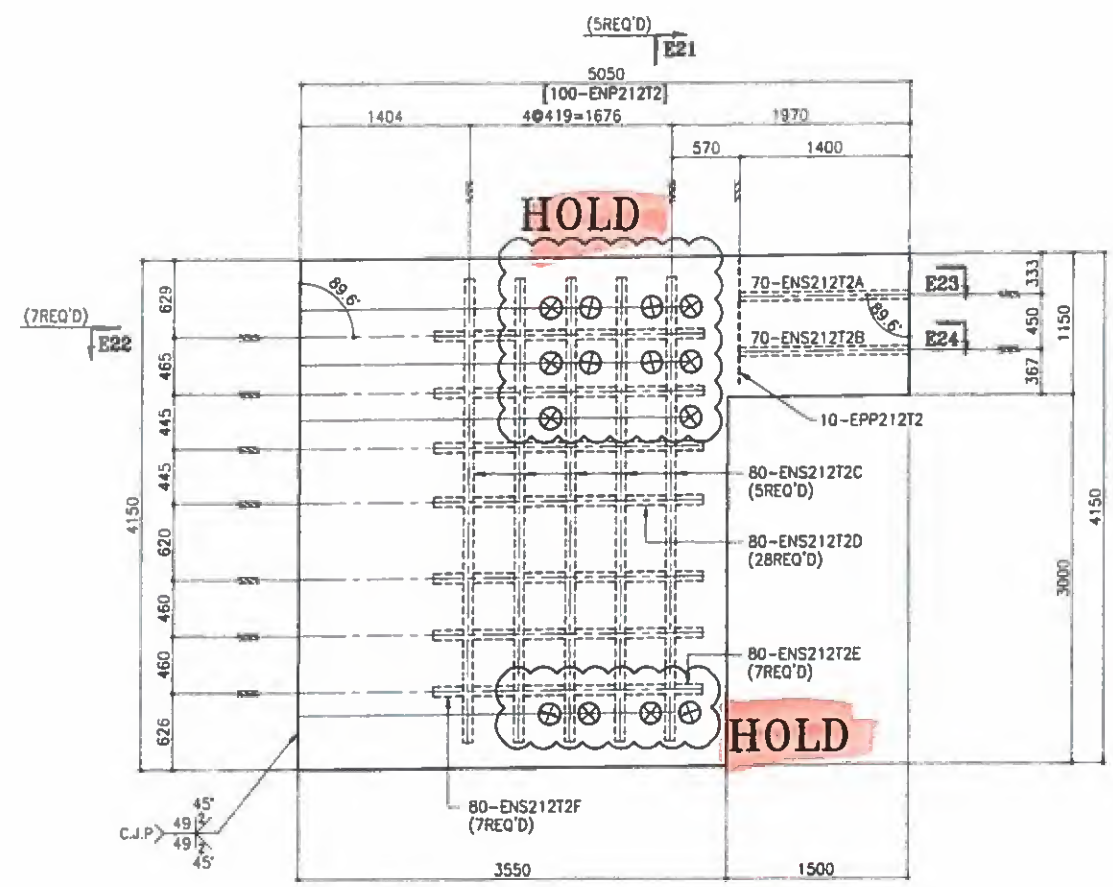
KEY-PLAN



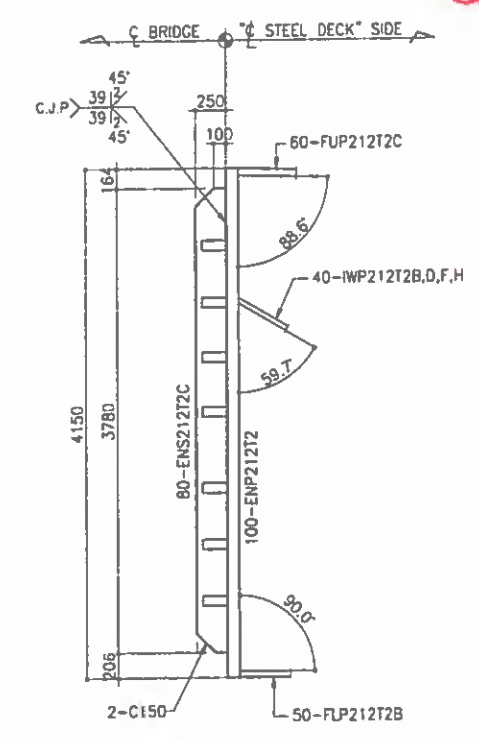
ONE - STEEL DECK - G212T2

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

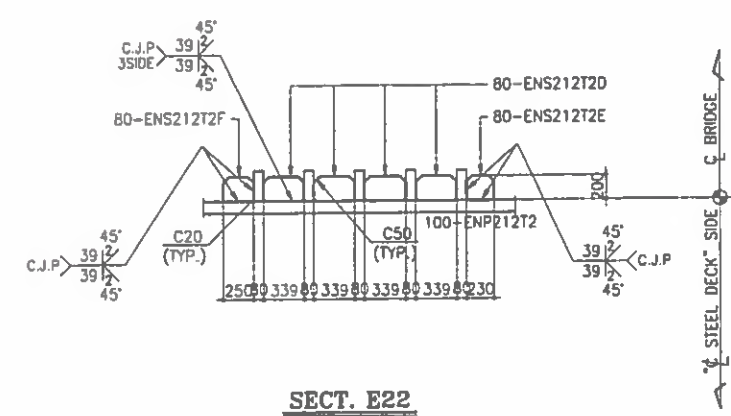
Refer To comments on Draw.
SD-D-112T1j-A



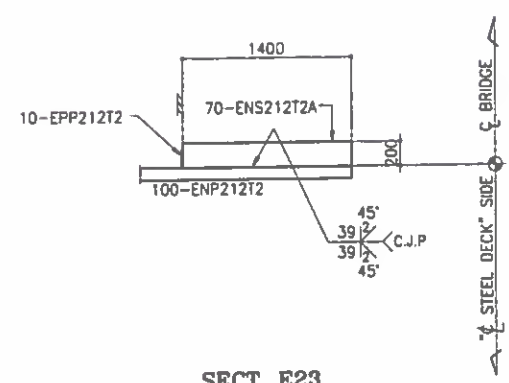
SECT. E1
"OUTSIDE END PLATE" DETAIL



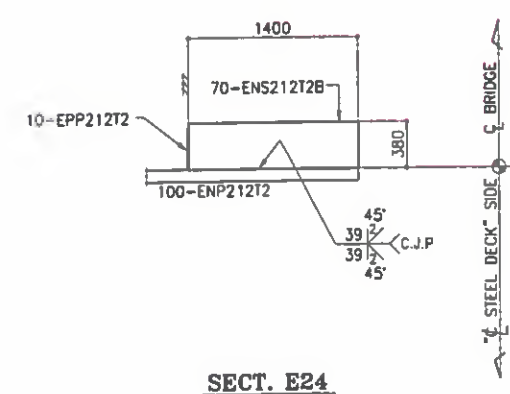
SECT. E21



SECT. E22

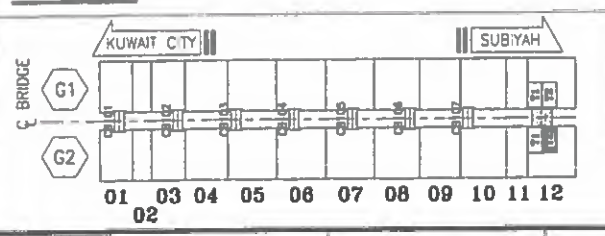


SECT. E23



SECT. E24

KEY-PLAN



ONE - STEEL DECK - G212T2

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

- NOTES**
1. MATERIALS SEE D.O.M. UNLESS NOTED
 2. SCALLOP R=35, Ø=15 mm UNLESS NOTED
 3. ALL FILLET WELD: UNLESS NOTED
 4. FILLET WELD AROUND THE EDGE
 5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
**STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION**

PROJECT TITLE
**SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140**

DRAWING TITLE
**MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (9)**

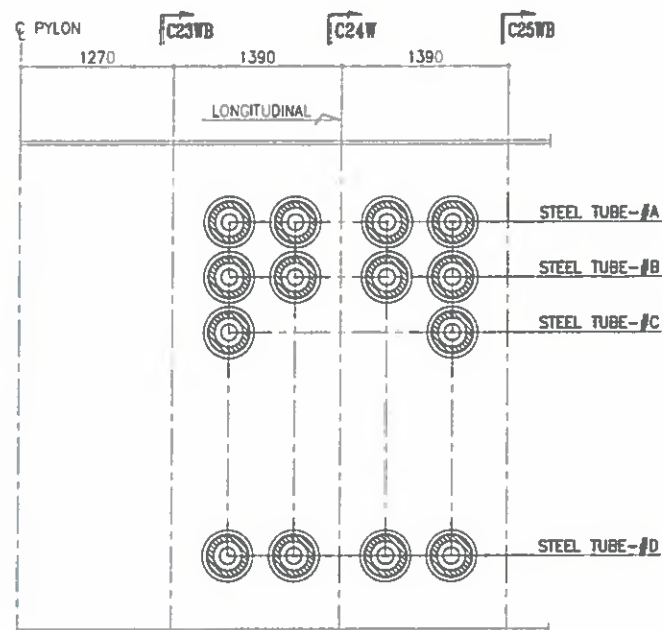
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION

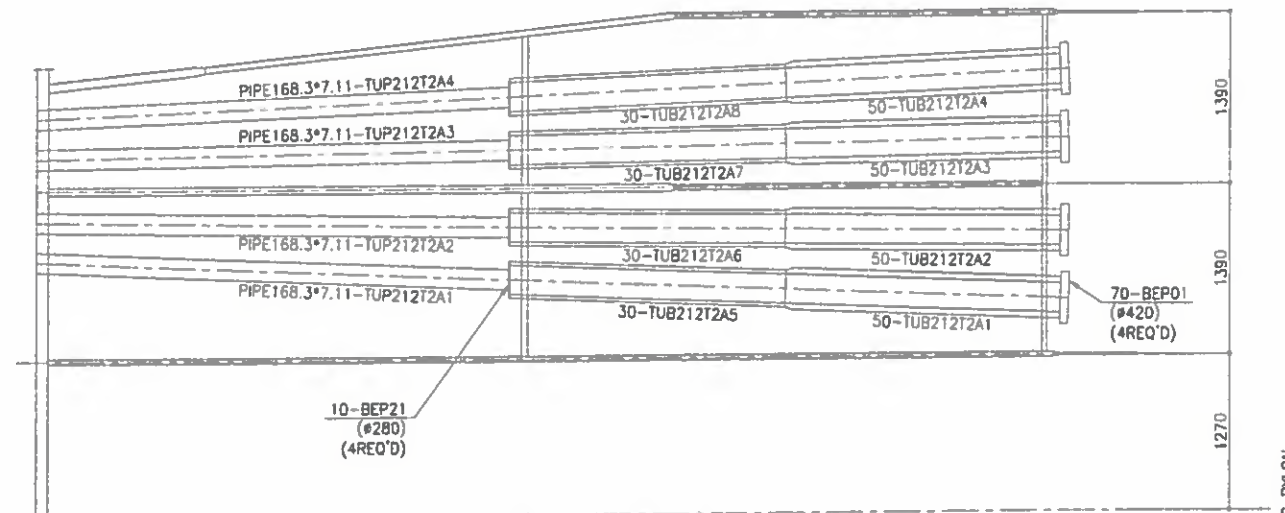
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DRAWING NO.
RA140-22-BRG-SD-D-212T2j

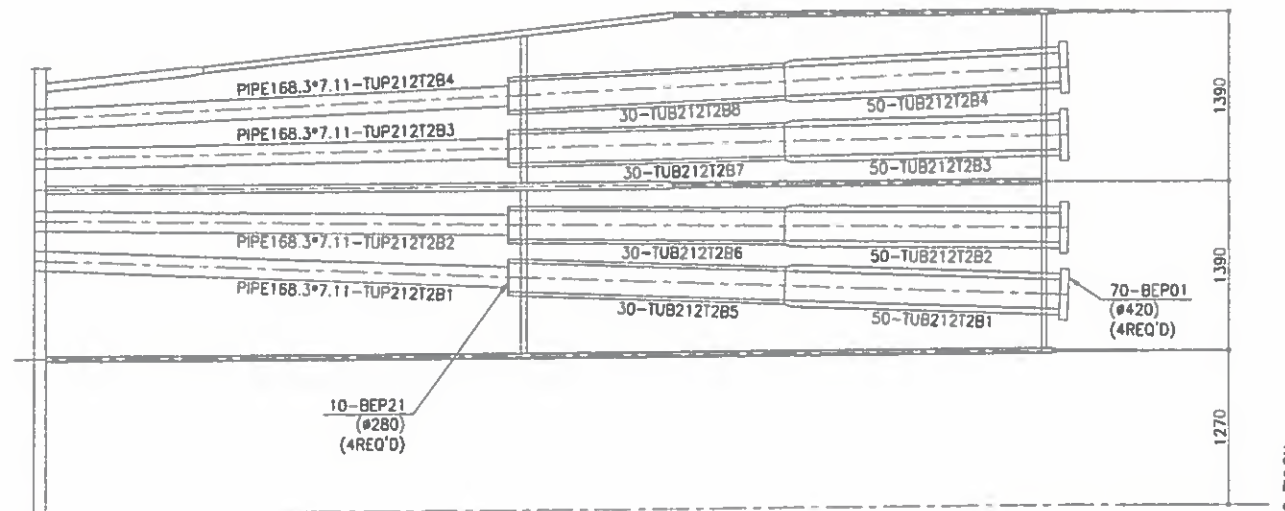
HOLD



STEEL TUBE ARRANGEMENT

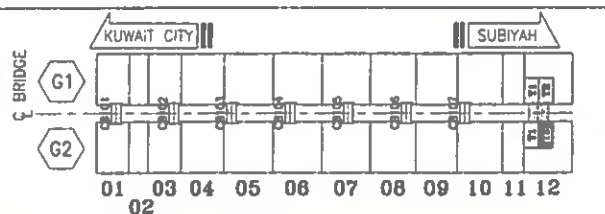


"STEEL TUBE-#A" DETAIL



"STEEL TUBE-#B" DETAIL

KEY-PLAN



ONE - STEEL DECK - G212T2

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE D.O.M. UNLESS NOTED
2. SCALLOP R= 36, O= 16 mm UNLESS NOTED
3. ALL FILLET WELD : UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPUCE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECK	APPROV.

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (10)

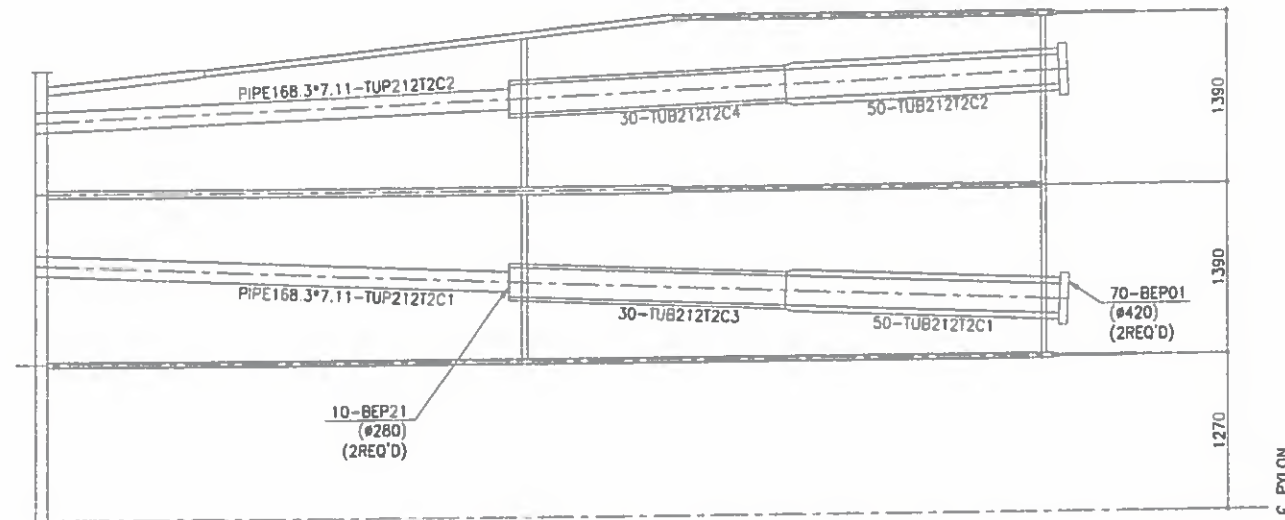
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.L.PARK	K.W. CHOI	S.S. SON	S.M. KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
Combined Group

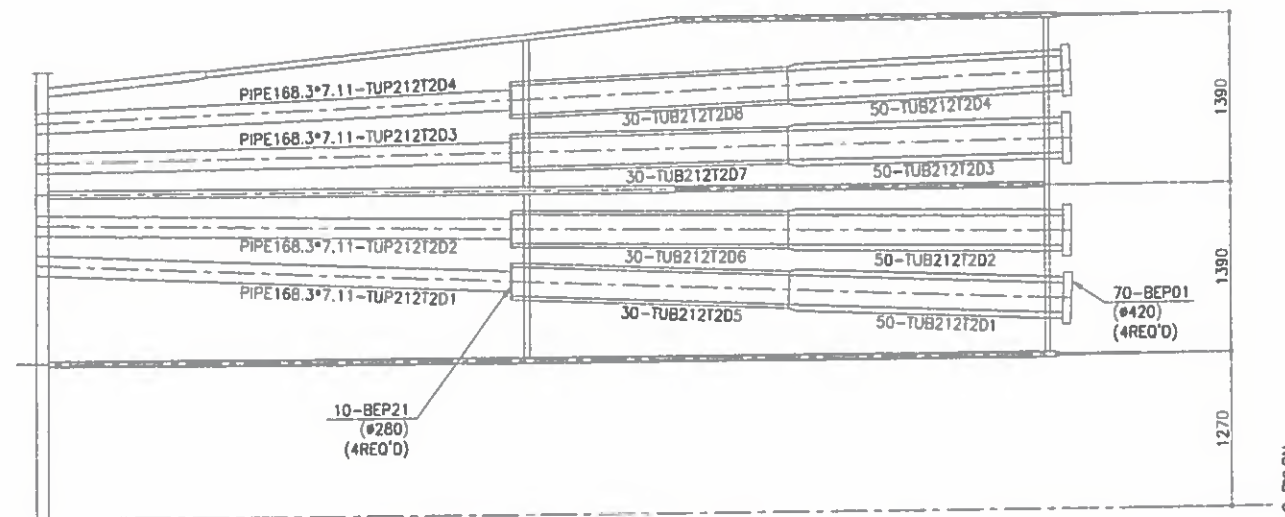
DRAWING NO.
RA140-22-BRG-SD-D-212T2k
REV.
A

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

HOLD

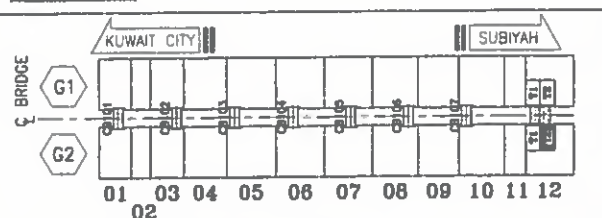


"STEEL TUBE-#C" DETAIL



"STEEL TUBE-#D" DETAIL

KEY-PLAN



ONE - STEEL DECK - G212T2

FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE B.O.M. UNLESS NOTED
2. SCALLOP R= 30, D= 15 mm UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{8}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C15 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (11)

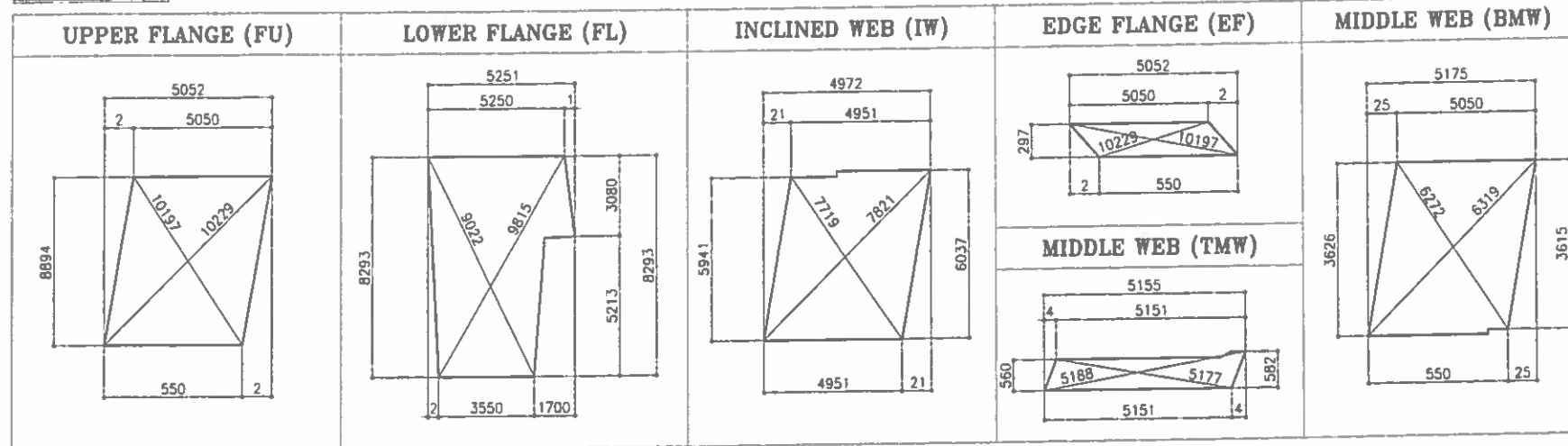
SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI ENGINEERING & CONSTRUCTION
Combined Group
Contracting Company

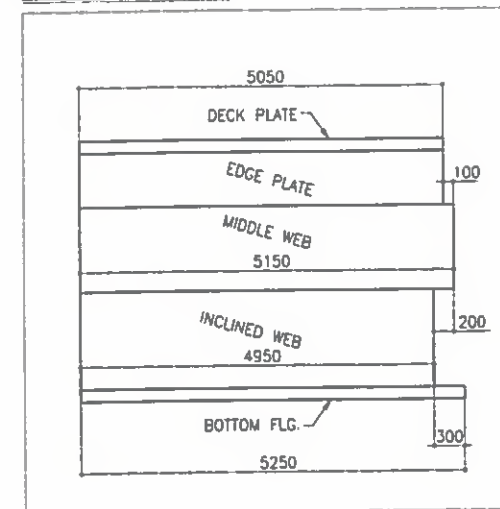
DRAWING NO.
RA140-22-BRG-SD-D-212T2m
REV.
A

FOR
APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

DIAGONAL



ASSEMBLY VIEW



FOR CONSTRUCTION
 Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE S.O.M. UNLESS NOTED
2. SCALLOP R=38, D=15 UNLESS NOTED
3. ALL FILLET WELD: $\frac{1}{4}$ UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C18 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET.	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
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EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

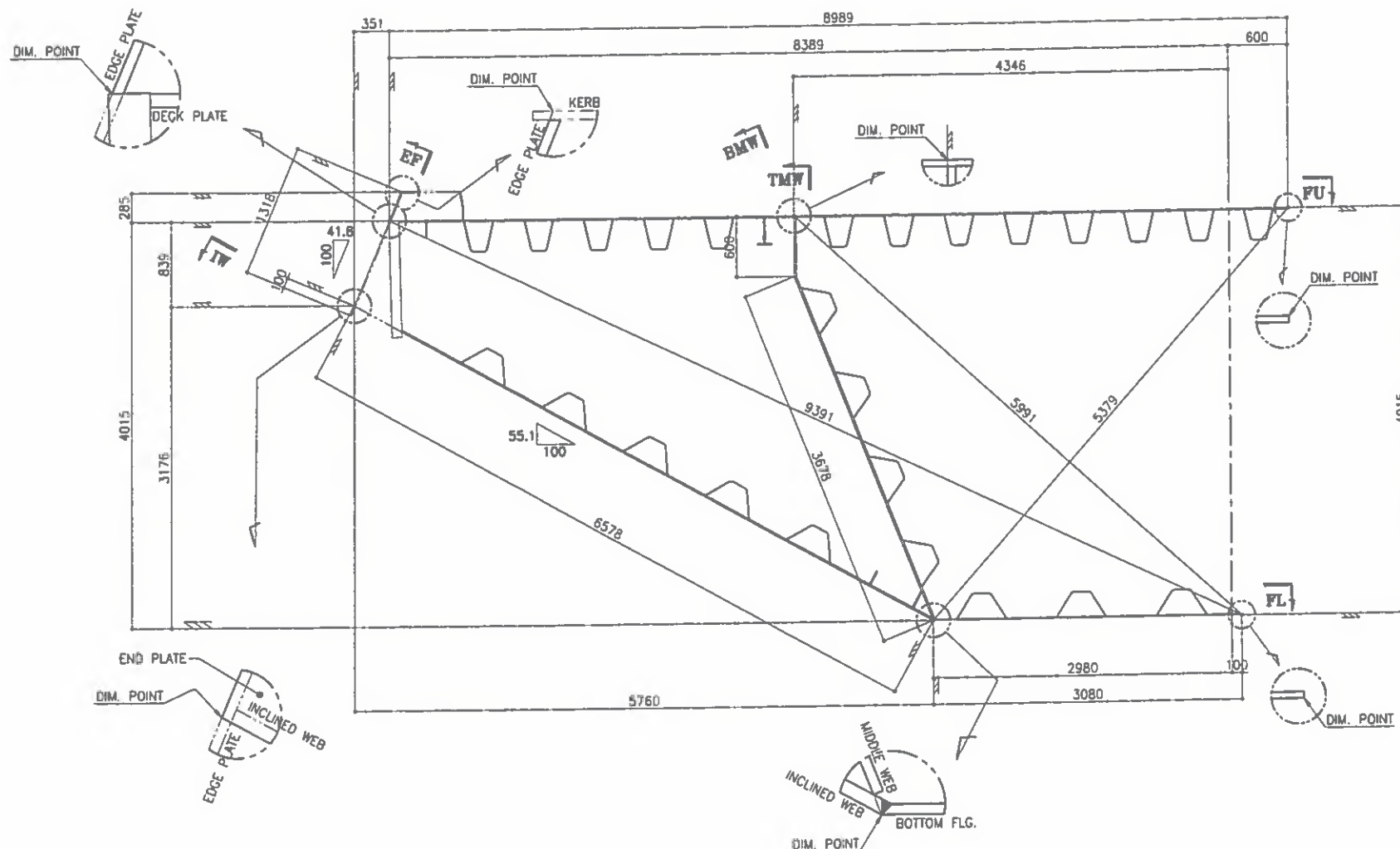
DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (12)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
 ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-D-212T2n

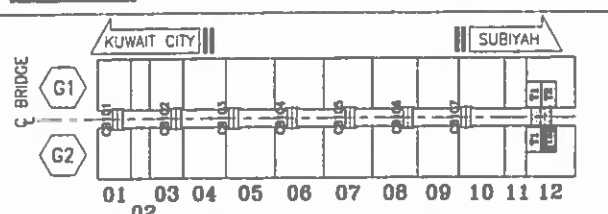
FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON

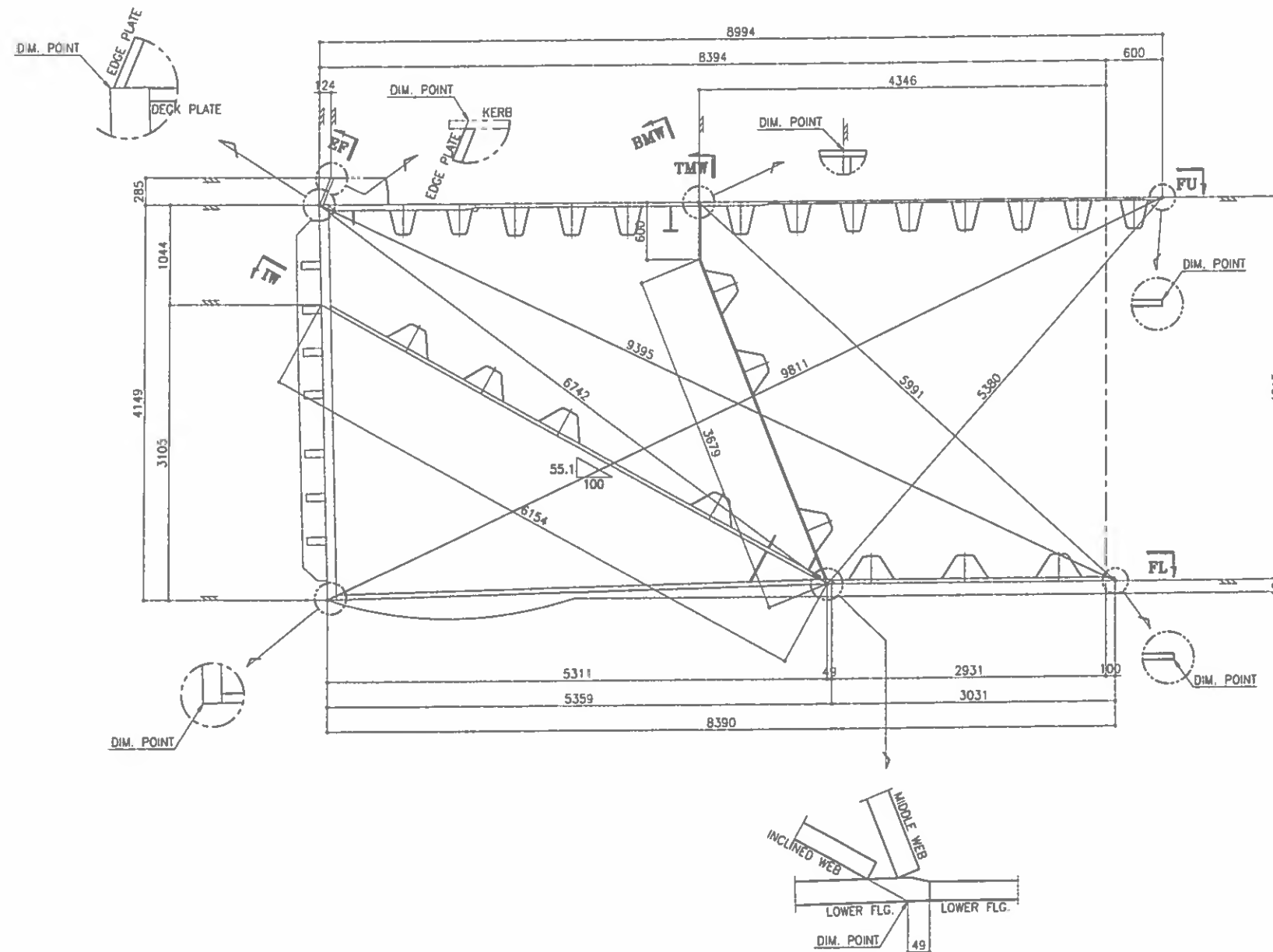


GENERAL SECTION [G112] JOINT SIDE

ONE - STEEL DECK - G212T2

KEY-PLAN

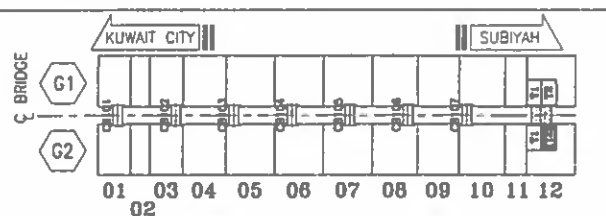




GENERAL SECTION
[G112T1] JOINT SIDE

ONE - STEEL DECK - G212T2

KEY-PLAN



FOR CONSTRUCTION
Date: 27/02/16 Signature: M.J. LEE

NOTES

1. MATERIALS SEE S.D.1, UNLESS NOTED
2. SCALLOP R= 35, D= 15, UNLESS NOTED
3. ALL FILLET WELD: UNLESS NOTED
4. FILLET WELD AROUND THE EDGE
5. C10 or C16 or C20: FILL WITH WELD

REF. DRAWING

MARK	REF. DWG. NO.
GROOVE WELD DET	SD-WD-101~109
C23WB	SD-SEC-233~236
C24W	SD-SEC-241~242
C25WB	SD-SEC-245~248
USU*, USL*	SD-STD-001, 002
USC01 ~ USC14	SD-STD-101~109
USC21 ~ USC29	SD-STD-111~114
USC31 ~ USC40	SD-STD-121~125
USC41	SD-STD-131
USC51 ~ USC74	SD-STD-141~149
ISC01 ~ ISC10	SD-STD-181~184
SPLICE	SD-STD-301~305
DS01, DS02	SD-STD-401~403

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHEC.	APPRO.
A	2016.02.25	FOR APPROVAL	H.I.PARK	S.S.SON	S.M.KHON

EMPLOYER
STATE OF KUWAIT
MINISTRY OF PUBLIC WORKS
ROADS ADMINISTRATION

PROJECT TITLE
SHEIKH JABER AL AHMAD AL SABAH
CAUSEWAY PROJECT (MAIN LINK)
CONTRACT RA/140

DRAWING TITLE
MAIN BRIDGE
STEEL DECK
STEEL DECK DETAIL "G212T2" (13)

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
NONE	H.I.PARK	K.W.CHOI	S.S.SON	S.M.KHON
DATE ISSUED	2016.02.25	2016.02.25	2016.02.25	2016.02.25

CONTRACTOR
HYUNDAI
ENGINEERING & CONSTRUCTION

DRAWING NO.
RA140-22-BRG-SD-D-212T2p

FOR APPROVAL
2016.02.25
HYUNDAI E&S
YOULCHON